# Table of Contents

- Organising Societies and Sections of the RBSS ......................................................... 4
- Scientific Secretariat and Congress Secretariat ......................................................... 4
- Welcome Address ......................................................................................................... 5
- Programme at a Glance ................................................................................................. 6
- Floor plan of the Thermae Palace Hotel ..................................................................... 7
- Sponsors ....................................................................................................................... 9
- Opening Ceremony ...................................................................................................... 13
- Scientific Sessions on Wednesday 11th May ............................................................... 19
- Scientific Sessions on Thursday 12th May ................................................................ 22
- Scientific Sessions on Friday 13th May ..................................................................... 29
- Scientific Sessions on Saturday 14th May ................................................................ 36
- Board RBSS .............................................................................................................. 39
- Belgian Surgical Weeks ............................................................................................ 43
- Abstracts of Free Papers ........................................................................................... 47
- Abstracts of Lectures ................................................................................................. 77
Royal Belgian Society for Surgery (RBSS) npa
Koninklijk Belgisch Genootschap voor Heelkunde (KBGH) vzw
Société Royale Belge de Chirurgie (SRBC) asbl

in collaboration with
BAAS, BACTS, BAST, BELAPS, BGES, BSSO, BSVS, BTS, CC
and the sections of RBSS: BSAWS, BSBS, BSCRs, BSES,
BSHBPS, BSUGIS, BeSOMS

TWELFTH BELGIAN SURGICAL WEEK
Ostend, Thermae Palace Hotel
11th - 12th - 13th - 14th May 2011

GOOD CLINICAL PRACTICE AND RIGHT INDICATIONS IN SURGERY: A MATTER OF ETHICS OR ECONOMICS

Programme

RBSS's Major Sponsors
The 12th Belgian Surgical Week is organised together with:

Belgian Association for Ambulatory Surgery (BAAS)
Belgian Association for Cardiothoracic Surgery (BACTS)
Belgian Association for Pediatric Surgery (BELAPS)
Belgian Group for Endoscopic Surgery (BGES)
Belgian Society for Surgical Oncology (BSSO)
Belgian Society for Vascular Surgery (BSVS)
Belgian Association for Surgical Trainees (BAST)
Collegium Chirurgicum (CC)

and the Sections of the RBSS:

Belgian Section for Abdominal Wall Surgery (BSAWS)
Belgian Section for Breast Surgery (BSBS)
Belgian Section for Colorectal Surgery (BSCRS)
Belgian Section for Endocrine Surgery (BSES)
Belgian Section for Hepatobiliary and Pancreatic Surgery (BSHBPS)
Belgian Section for Obesity and Metabolic Surgery (BeSOMS)
Belgian Section for Upper GI Surgery (BSUGIS)

Scientific Secretariat:

ROYAL BELGIAN SOCIETY FOR SURGERY npa
Av. W. Churchill-laan 11/30, Brussel 1180 Bruxelles
Phone +32 (0)2 374 51 58 - Fax +32 (0)2 374 96 28
E-mail: amb@skynet.be
Website: www.belsurg.org

Congress Secretariat:

Semico nv/sa
Korte Meer 16
9000 Gent
E-mail: info@semico.org
Website: http://www.surgeryweek.be
Welcome Address

Dear Colleagues and Friends,

The Belgian Surgical Week, the Annual Meeting organized by the Royal Belgian Society for Surgery (RBSS) together with other Belgian Surgical Societies, is a unique opportunity for all surgeons practicing in Belgium to exchange the most up-to-date scientific information and to meet new, young and older colleagues. This year, we celebrate the 12th anniversary of the BSW, an important moment in a life time, a moment to think of what we have accomplished and a moment to reflect on what we want for the future.

The changes introduced 12 years ago by the past Secretary Generals were a great success. The sections live their life now, organizing many annual events. Yet it is time to adapt a little the concept of the 12th BSW. From now on, so as to enforce the cohesion between the surgeons, whatever their discipline, there will be less parallel meetings and more joint sessions held by sections and societies together. The traditional Thursday morning inaugural session will be maintained, but on Friday morning, a plenary session will be organized in collaboration with all the sections and societies. The Saturday morning session, held by the Collegium Chirurgicum, will interest the whole surgical community too.

This year's scientific theme is entitled:

Good Clinical Practice and Right indications in Surgery: a matter of Ethics or Economics.

This subject is again somewhat provocative but will certainly interest the surgical community. It is a thought we all should have, both in the public sector as in private practice: the need to balance patient requirements, quality of care and economical pressure. Can money or legislation influence quality of care? This is the question which will be dealt with at the inaugural session. The use of quality indicators in order to obtain a better impact will be treated at the plenary session of Friday. As you will notice in the final program, many presentations in the different sessions will touch this topic too.

For the third time, the Scientific Prize (3000 euros) of the RBSS will be awarded to a junior RBSS member, younger than 35 years of age, first author, chosen amongst the five best submitted and presented papers.

For this 12th edition, we will stay at the Ostend Thermae Palace and use again the Semico-services.

The Surgical Night will be organized on Friday 13th May 2011 in the Royal Galleries situated next to the hotel. A lovely venue to celebrate this 12th birthday of the BSW! A candle light dinner will be served, with dancing to follow.

And ... for the 13th BSW, we are pleased to announce that it will take place in the Spa Conference Centrum.

We look forward to welcoming you once more in Ostend at the occasion of the 12th Belgian Surgical week.

Jan Lamote
Secretary General

Birgit Carly
President
### PROGRAMME AT A GLANCE

#### Wednesday 11/05/2011

<table>
<thead>
<tr>
<th>Time</th>
<th>Albert Hall</th>
<th>Boudewijn Room</th>
<th>Albert II Room</th>
<th>Albert Hall</th>
<th>Boudewijn Room</th>
<th>Albert II Room</th>
<th>Albert Hall</th>
<th>Boudewijn Room</th>
<th>Albert II Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.00-08.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>08.30-09.00</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>BELAPS</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
</tr>
<tr>
<td>09.00-09.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09.30-10.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.00-10.30</td>
<td>GA BSUGIS</td>
<td>GA BSES</td>
<td></td>
<td>Coffee break</td>
<td></td>
<td></td>
<td>Policy Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.30-11.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.00-11.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.30-12.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.00-12.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.30-13.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Thursday 12/05/2011

<table>
<thead>
<tr>
<th>Time</th>
<th>Albert Hall</th>
<th>Boudewijn Room</th>
<th>Albert II Room</th>
<th>Albert Hall</th>
<th>Boudewijn Room</th>
<th>Albert II Room</th>
<th>Albert Hall</th>
<th>Boudewijn Room</th>
<th>Albert II Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.00-08.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>08.30-09.00</td>
<td>How we do it</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
</tr>
<tr>
<td>09.00-09.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09.30-10.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.00-10.30</td>
<td>GA BSUGS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Coffee break</td>
<td></td>
</tr>
<tr>
<td>10.30-11.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.00-11.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.30-12.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.00-12.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.30-13.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.00-13.30</td>
<td>Lunch break</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GA BSBS</td>
<td></td>
</tr>
<tr>
<td>13.30-14.00</td>
<td>Satellite Symposium</td>
<td></td>
<td></td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
</tr>
<tr>
<td>14.00-14.30</td>
<td>How we do it</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
</tr>
<tr>
<td>14.30-15.00</td>
<td>BSORS</td>
<td>BACTS</td>
<td>BESOMS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.00-15.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.30-16.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Friday 13/05/2011

<table>
<thead>
<tr>
<th>Time</th>
<th>Albert Hall</th>
<th>Boudewijn Room</th>
<th>Albert II Room</th>
<th>Albert Hall</th>
<th>Boudewijn Room</th>
<th>Albert II Room</th>
<th>Albert Hall</th>
<th>Boudewijn Room</th>
<th>Albert II Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.00-08.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>08.30-09.00</td>
<td>How we do it</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
</tr>
<tr>
<td>09.00-09.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09.30-10.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.00-10.30</td>
<td>GA BSBS</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
<td>Free Papers</td>
</tr>
<tr>
<td>10.30-11.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.00-11.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.30-12.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.00-12.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.30-13.00</td>
<td>Free Papers</td>
<td>BACTS</td>
<td>BESOMS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Saturday 14/05/2011

<table>
<thead>
<tr>
<th>Time</th>
<th>Albert Hall</th>
<th>Boudewijn Room</th>
<th>Albert II Room</th>
<th>Albert Hall</th>
<th>Boudewijn Room</th>
<th>Albert II Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.00-08.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>08.30-09.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09.00-09.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09.30-10.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.00-10.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Key
- Lunch break
- Coffee break
- GA = General Assembly
- Presession
- Country Symposium
Royal Belgian Society for Surgery

Sponsors

Mdeon visa n° 10/V2/0694/001540
Exhibition during the Belgian Surgical Week 2011
Major Sponsors

KCI Medical

Johnson & Johnson
Royal Belgian Society for Surgery

Opening Ceremony

Thursday, 12th May 2011
GOOD CLINICAL PRACTICE AND RIGHT INDICATIONS IN SURGERY:

A matter of ethics or economics

* * *

OPENING CEREMONY

QUALITY OF CARE IN SURGERY

Moderators: B. Carly (Brussel), C. Bertrand (Haine-St-Paul)

Inaugural session:
Quality of care in Surgery

10.30 Does money make the difference?
Quality of care in a Belgian public hospital
N. Clumeck (Bruxelles, Belgium)

Quality of care in a Belgian private clinic
J. De Toeuf (Bruxelles, Belgium)

11.30 Can legislation make the difference?
L. Michel (Mont Godinne, Belgium)

12.00 Ethics and efficiency: are they compatible?
Y. Husden (Bruxelles, Belgium)
Royal Belgian Society for Surgery

Programme
Wednesday, 11th May 2011

How we do it

Albert Hall

Moderators:  B. Detroz (Liège, Belgium)  
W. Ceelen (Gent, Belgium)

2.00 Transanal endoscopic microsurgery (TEM) – The Buess procedure
D. Leonard, A. Kartheuser (Louvain-en-Woluwe, Belgium)

Endoscopic submucosal dissection (ESD)
H. Piessevaux (Louvain-en-Woluwe, Belgium)

2.40 How to deal with a hiatal hernia during and after bariatric surgery
J. Himpe (Dendermonde, Belgium)

3.00 Tips and tricks in redo bariatric surgery
M. Goergen (Luxembourg, GD Luxembourg)

3.30 Coffee Break

Moderators:  B. Carly (Bruxelles, Belgium)  
M. Goergen (Luxembourg, GD Luxembourg)

4.00 Tips and tricks in lap sleeve gastrectomy
B. Dillemans (Brugge, Belgium)

4.30 Sils cholecystectomy
S. de Ghent (Aalst, Belgium)

Transvaginal cholecystectomy
F. Berrevoet (Gent, Belgium)

5.00 Informed decision-making in breast surgery
S. Van Slycke (Aalst, Belgium)
Wednesday, 11th May 2011

Free paper session

Moderators: D. Ysebaert (Antwerpen, Belgium)
            O. Detry (Liège, Belgium)

2.00 Surgical simulation: learning a wide variety of surgical procedures in a shorter interval
    FP 1
    H. De Praetere, P. Sergeant (Leuven, Belgium)

2.10 Allocation in liver transplantation: is the sickest-first principle justified?
    FP 2
    B. Van Geluwe, I. Jochmans, S. Verest, N. Meurisse, A. Wolthuis, B. Desschans,
    K. Vromman, W. Van Steenbergen, D. Cassiman, C. Verslype, P. Ferdinande,
    G. Meyfroidt, D. Messotten, R. Aerts, W. Laleman, D. Monballiu, F. Nevens, J. Pirenne
    (Leuven, Belgium)

2.20 Variation of the kidney graft vessels during laparoscopic living donor nephrectomy
    (LLDN): surgical management and impact on early graft function
    FP 3
    A-D. Hoang, D. Mikhalski, A. Buggenhout, P. Loi, N. Broeders, D. Abramowicz,
    V. Donckier (Bruxelles, Belgium)

2.30 Outcome after liver transplantation using donation after cardiac death donors: a single-
    centre experience
    FP 4
    J. Francois, S. Vandenbussche, B. Desschans, G. Van Helleputte, N. Grossen, D. Claes,
    J. De Roey, S. Dirix, F. Nevens, R. Aerts, J. Pirenne, D. Monballiu (Leuven, Belgium)

2.40 Living donor kidney transplantation in a single centre: 45 years’ experience
    FP 5
    F. Fusaro, A. Benoit, M. De Meyer, L. De Pauw, D. Patrono, D. Chaïb-Eddour, E. Goffin,
    N. Kanaan, Y. Pirson, C. Legrand, M. Mourad (Louvain-en-Woluwe, Belgium)

2.50 Neuromonitoring in thyroid surgery
    FP 6
    F. Charara, D. Dequanter, P. Paulus, M. Shahla, Ph. Lothaire (Charleroi, Belgium)

3.00 A new technique for severe infantile hypertrophic pyloric stenosis
    FP 7
    Y. Alalayet, M. Miserez, M. Khizer, M. Khan Abdul (Riyadh, Saudi Arabia, Leuven,
    Belgium)

3.10 The trouble with incisional hernias – does laparoscopy really decrease the risk for
    wound complications following colorectal surgery?
    FP 8
    N. Geurts, T. Lafullarde, T. Gys (Geel, Belgium)

3.20 Good clinical practice in inguinal hernia repair: why not back to basics?
    FP 9

3.30 Coffee Break
### Wednesday, 11<sup>th</sup> May 2011

#### Free paper session

**Moderators:**
- C. Coimbra (Liège, Belgium)
- Y. Van Molhem (Aalst, Belgium)

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.00</td>
<td>The prognostic significance of mucinous differentiation in colorectal cancer: a systematic review and meta-analysis</td>
<td>J. Verhulst, W. Ceelen (Gent, Belgium)</td>
</tr>
<tr>
<td>4.10</td>
<td>New approach in transanal endoscopic microsurgery</td>
<td>G. de Beco, B. Mansvelt, A. Dili, G. Molle, C. Bertrand (Haine-St-Paul, Belgium)</td>
</tr>
<tr>
<td>4.20</td>
<td>Pelvic exenteration: a retrospective study of a personal series of 106 patients</td>
<td>I. De Wever (Leuven, Belgium)</td>
</tr>
<tr>
<td>4.30</td>
<td>Anastomotic leakage after low anterior resection for rectal cancer: our experience</td>
<td>V. Hartman, Y. Pirenne, F. Van Elst, M. Vanderveken, D. Vervloesem, P. Willemsen (Antwerpen, Belgium)</td>
</tr>
<tr>
<td>4.40</td>
<td>Leakage after TME for locally advanced rectal cancer does not compromise oncological outcome but restrains patients from adjuvant chemotherapy</td>
<td>A. Wolthuis, F. Penninckx, S. Fieuws, A. D’Hoore (Leuven, Belgium)</td>
</tr>
<tr>
<td>4.50</td>
<td>Outcomes for case-matched single port colectomy are comparable with conventional laparoscopic colectomy</td>
<td>A. Wolthuis, F. Penninckx, S. Fieuws, A. D’Hoore (Leuven, Belgium)</td>
</tr>
<tr>
<td>5.00</td>
<td>Intraperitoneal chemotherapy: Bevacizumab lowers interstitial fluid pressure in an animal model of peritoneal carcinomatosis</td>
<td>J. Verhulst, N. Van Damme, W. Ceelen (Gent, Belgium)</td>
</tr>
<tr>
<td>5.10</td>
<td>THD, four years’ experience</td>
<td>Ch. Firket, A. Tabech, S. Ghewy, R. Algaba (Bruxelles, Belgium)</td>
</tr>
<tr>
<td>5.20</td>
<td>The role of a single bolus of orally administered water soluble contrast medium for small bowel adhesive disease: a retrospective single centre experience</td>
<td>T. Oyen, M. Scheltinga, R. Roumen (Veldhoven, The Netherlands)</td>
</tr>
</tbody>
</table>
Thursday, 12th May 2011

Belgian Section of Upper G.I. Surgery
Moderators: W. Coosemans (Leuven, Belgium)
            A. De Roover (Liège, Belgium)

8.30 Quality criteria in laparoscopic upper G-I procedures
       R. Rosati (Milan, Italy) 9

8.55 Quality criteria in thoracoscopic upper G-I procedures
       G. Decker (Luxembourg, G.D. Luxembourg) 10

9.20 A third of a century journey through the foregut: from belief to evidence
       J-M Collard (Louvain-en-Woluwe, Belgium) 11

10.00 Coffee Break

10.00 General Assembly BSUGIS  Albert Hall
10.00 General Assembly BSES  Boudewijn Room
2.10 General Assembly BSCRS  Albert Hall
5.30 General Assembly BeSOMS  Albert II Room
6.00 General Assembly RBSS  Albert Hall
Thursday, 12th May 2011

Free paper session

**Moderators:** M. Duinslaeger (Brussel, Belgium)
A. Kartheuser (Louvain-en-Woluwe, Belgium)

**8.30** Hipec as “adjuvant” treatment: probably not a useful strategy to improve survival in T4 colon cancer

*D. Hompes, J. Tiek, A. Wolthuis, S. Fieuws, F. Penninckx, A. D’Hoore (Leuven, Belgium)*

**8.40** Surgical recurrence after ileocolar resection for Crohn’s disease: excellent mid-term results

*Y. Mandeville, A. Wolthuis, P. Rutgeerts, G. Van Assche, S. Vermeire, S. Fieuws, F. Penninckx, A. D’Hoore (Leuven, Belgium)*

**8.50** Ten-year-outcome after laparoscopic ventral rectopexy for external rectal prolapse

*B. Van Geluwe, A.Wolthuis, F. Penninckx, A. D’Hoore (Leuven, Belgium)*

**9.00** Our 20 years’ experience with the restorative coloproctectomy for ulcerative colitis: what did we learn?

*A. De Buck, D. Hompes, A. Wolthuis, F. Penninckx, A. D’Hoore (Leuven, Belgium)*

**9.10** Laparoscopic sigmoid resection with transrectal specimen extraction for bowel endometriosis has a better outcome compared to conventional laparoscopic sigmoid resection

*A. Wolthuis, Ch. Meuleman, C. Tomassetti, Th. D’Hooghe, S. Fieuws, F. Penninckx, A. D’Hoore (Leuven, Belgium)*

**9.20** Enhanced recovery after surgery (ERAS) protocol: prospective study of outcome in colorectal surgery

*J. Fierens, A. Wolthuis, F. Penninckx, A. D’Hoore (Leuven, Belgium)*

**9.30** Long-term impact of anorectal dysfunction after rectal cancer surgery


**9.40** Ultra low anterior resection following chemoradiation: the end of the 1 cm rule?

*P. Elshout, W. Ceelen, D. Vande Putte, Y. Van Nieuwenhove, P. Pattyn, J. Bontinck (Gent, Belgium)*

**9.50** Optimal timing for TME-surgery to assess complete response after neoadjuvant chemoradiotherapy in mid and distal rectal cancer

*A. Wolthuis, F. Penninckx, S. Fieuws, A. D’Hoore (Leuven, Belgium)*

**10.00** Coffee Break
Thursday, 12th May 2011

Free paper session

Albert II Room

Moderators: D. Burnon (Bruxelles, Belgium)
J.M. Gillardin (Brugge, Belgium)

8.30 Technical features and results of 63 primary sils gastric bypasses
S. Ralea, J. Alle, A. L. Donfut (La Louvière, Belgium)  
FP 28

8.40 Laparoscopic sleeve gastrectomy as a single-stage procedure for the treatment of morbid obesity: quality of life, resolution of comorbidities, food tolerance and 6-year results for weight loss
M. D’Hondt, S. Vanneste, H. Pottel, D. Devriendt, F. Van Rooy, F. Vansteenkiste (Kortrijk, Belgium)  
FP 29

8.50 Small bowel obstruction after antecolic antegastric laparoscopic Roux-en-Y gastric bypass: a single centre 7-years’ review
M. Abasbassi, M. D’Hondt, B. Deylgat, H. Pottel, F. Van Rooy, F. Vansteenkiste, D. Devriendt (Kortrijk, Belgium)  
FP 30

9.00 The impact of surgical volume and experience on outcome in secondary gastric bypass after failed adjustable gastric banding
M. De Visschere, E. Van Dessel, D. Van der Fraenen, S. Van Cauwenberge, B. Dilemans (Brugge, Belgium)  
FP 31

9.10 Prophylactic cholecystectomy, a mandatory step in morbidly obese patients undergoing laparoscopic Roux-en-Y gastric bypass?
M. D’Hondt, F. Vanrykel, B. Deylgat, G. Sergeant, D. Devriendt, F. Van Rooy, F. Vansteenkiste (Kortrijk, Belgium)  
FP 32

9.20 Vertical sleeve gastrectomy and omentectomy as a durable solution for type 2 diabetes mellitus
E. Post, M. van Dorp, S. Helsen, G. Hubens, W. Vaneerdeweg (Antwerpen, Belgium)  
FP 33

9.30 Life-threatening side effects of malabsorptive procedures in obese patients necessitating conversion surgery: a review of 14 cases
W. Willaert, Y. Van Nieuwenhove, T. Henckens, D. Van de Putte, K. Van Renterghem, W. Ceelen, P. Pattyn (Gent, Belgium)  
FP 34

9.40 Preoperative very low calorie diet (VLCD) and operative outcome after laparoscopic gastric bypass. A randomized multicentre study
E. Spriet, Y. Van Nieuwenhove, P. Pattyn, Z. Dambrauskas¹, A. Campillo-Soto¹, F. van Dielen¹, R. Wiezer¹, I. Janssen, M. Kramer, A. Thorell⁵ (Gent, Belgium; ¹Kaunas, Lithuania, ²Murcia, Spain; ³Eindhoven, ⁴Nieuwenhoven, The Netherlands; ⁵Stockholm, Sweden)  
FP 35

10.00 Coffee Break
Inaugural Session

Quality of care in Surgery

Moderators: B. Carly (Brussel, Belgium)
C. Bertrand (Haine-St-Paul, Belgium)

10.30 Does money make the difference
Quality of care in a Belgian public hospital
N. Clumeck (Bruxelles, Belgium)

11.00 Quality of care in a Belgian private clinic
J. De Toeuf (Bruxelles, Belgium)

11.30 Can legislation make the difference?
Point of view of health care provider
L. Michel (Mont Godinne, Belgium)

12.00 Ethics and efficiency: are they compatible?
Y. Husden (Bruxelles, Belgium)

12.30 Opening Reception (all participants)

13.00 Lunch in hotel restaurant (by invitation only)
Thursday, 12th May 2011

Belgian Section of Colo-Rectal Surgery

**Colon surgery**

*Moderators: M. Duinslaeger (Brussel, Belgium)*

_C. Coimbra (Liège, Belgium)*

2.30 Fast-Track

A. Kartheuser (Louvain-en-Woluwé, Belgium)

16

2.50 Enhanced recovery without real Fast-Track protocol

J. Van de Stadt (Bruxelles, Belgium)

17

3.10 Sacral nerve stimulation: The golden standard for faecal incontinence?

D. Van de Putte (Gent, Belgium)

18

3.35 Quality of staging

L. Balliu (Antwerpen, Belgium)

19

4.00 Coffee break

**Rectal cancer**

*Moderators: S. Landen (Bruxelles, Belgium)*

_M. Vanderveken (Antwerpen, Belgium)*

4.30 Laparoscopic TME

Y. Van Molhem (Aalst, Belgium)

20

5.00 Defunctioning stoma formation and leak rate after total mesorectal excision

_F. Penninckx (Leuven, Belgium) on behalf of Procare*

21

5.30 Quality of life after colorectal surgery

R. Chamlou (Bruxelles, Belgium)

22
Thursday, 12th May 2011

Belgian Association of Cardio-Thoracic Surgery  
Boudewijn Room

Cardiac Topics
Moderators: I. Rodrigus (Antwerpen, Belgium)  
Ph. Kolh (Liège, Belgium)

2.30 From the Database Committee: overview of the 2009 data  
B. Stockman (Antwerpen, Belgium)

3.00 From the College for Cardiac Surgery: "the Type A aortic dissection project"  
M. Radermecker (Liège, Belgium)

3.30 Transcutaneous Aortic Valve Implantation (TAVI): 2010 Position Statement from the BACTS  
P. Herijgers (Leuven, Belgium)

4.00 Coffee Break

VATS Lobectomy
Moderators: A. Poncelet (Louvain-en-Woluwe, Belgium)  
J. Hendriks (Antwerpen, Belgium)

4.30 Are oncologic principles preserved?  
Y. Sokolow (Bruxelles, Belgium)

5.00 Techniques  
H. Decaluwe (Leuven, Belgium)

5.30 Functional repercussions  
B. Balduyck (Antwerpen, Belgium)
### Thursday, 12th May 2011

**Belgian Section of Obesity and Metabolic Surgery**

**Weight regain after Gastric Bypass**
*Moderators:  B. Dillemans (Brugge, Belgium)  
E. Van Vyve (Bruxelles, Belgium)*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 2.30  | A surgical indication?  
*M. Lannoo (Leuven, Belgium)* | 29 |
| 2.40  | Endoluminal techniques (Rose Procedure/ Stomaphyx)  
*N. Bouvy (Maastricht, The Netherlands)* | 30 |
| 3.05  | Laparoscopic gastric pouch correction  
*J. Closset (Bruxelles, Belgium)* | 31 |
| 3.15  | Laparoscopic non adjustable band placement  
*L. Hendrickx (Antwerpen, Belgium)* | 32 |
| 3.25  | Laparoscopic adjustable band placement  
*B. Dillemans (Brugge, Belgium)* | 33 |
| 3.35  | Lengthening the alimentary limb  
*B. Navez (Gilly, Belgium)* | 34 |
| 3.45  | Conversion to a distal GBP  
*L. Lemmens (St Niklaas, Belgium)* | 35 |
| 4.00  | Coffee Break                                                             |    |

**The Mini Gastric Bypass**
*Moderators:  B. Navez (Gilly, Belgium)  
G. Hubens (Antwerpen, Belgium)*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 4.30  | Rationale of the mini gastric bypass  
*J. Himpens (Dendermonde, Belgium)* | 36 |
| 4.40  | Surgical-technical aspects  
*J.M. Chevallier (Paris, France)* | 37 |
| 5.05  | Reported outcome results (metabolic/weight loss)  
*A. De Roover (Liège, Belgium)* | 38 |
| 5.15  | Debate: The Mini Gastric Bypass versus the RNY gastric bypass’  
○ Pro Mini Gastric Bypass  
• *J.M. Chevallier (Paris, France)*  
○ Pro RNY Gastric Bypass  
• *Y. Van Nieuwenhove (Gent, Belgium)* | 39 |

2.10  | General Assembly BSCRS  
Albert Hall |
5.30  | General Assembly BeSOMS  
Albert II Room |
6.00  | General Assembly RBSS  
Albert Hall |
**Belgian Association of Pediatric Surgery**

**Albert Hall**

**Friday, 13th May 2011**

**Interruption of pregnancy: gut feeling or hard criteria**

Moderators: M. Demarche (Liège, Belgium)  
A. De Backer (Brussel, Belgium)

8.30 The gynaecologist  
A. Loccufier (Brugge, Belgium)

8.45 The radiologist  
F. Claus (Leuven, Belgium)

9.00 The neonatologist  
S. Vanden Eijnden (Bruxelles, Belgium)

9.15 Panel discussion together with the paediatric surgeons

Selected papers

9.30 Diaphragmatic plication for neonatal phrenic nerve injury due to traumatic delivery: a case report  
E. Van der Veken, E. Van Hoorde, T. Khalil, F. Otte, P. Corouge, J. Papadopoulos (Haine-St-Paul, Belgium)

9.40 Unusual late complication of hemolytic uremic syndrome  
M. Demarche, A. Lefevre, L. Rausin, I. Etienne, P. Erpicum (Liège, Belgium)

9.50 Meconium peritonitis: unusual cause  
M. Demarche, N. Machairas, R. Vieillevoye, K. Delbecque, P. Jamblin, P. Erpicum (Liège, Belgium)

10.00 Impact of pre-transplant liver hemodynamics and portal reconstruction techniques on post-transplant portal vein complications in pediatric liver transplantation: a retrospective analysis in 197 recipients  
C. de Magnée, C. Bourdeaux, F. De Dobbeleer, M. Janssen, R. Menten, Ph. Clapuyt, R. Reding (Louvain-en-Woluwe, Belgium)

---

1.00 General Assembly BSBS  
Albert II Room

1.30 General Assembly BSHBPS  
Albert Hall

3.30 General Assembly BGES  
Albert Hall

3.30 General Assembly BSSO  
Boudewijn Room

7.00 General Assembly Belsurg  
Albert Hall
Friday, 13th May 2011

Free paper session

8.30 Clearance capacity of the future remnant liver can predict liver failure after hepatectomy

FP 36

8.40 Duodenal contamination of gastric contents in gastroesophageal reflux disease (GERD) patients

FP 37

8.50 Pancreatic surgery: a 10-year evaluation in a tertiary referral centre

FP 38

9.00 Antrally-inervated whole stomach as esophageal replacement

FP 39

9.10 Duodenal switch operation for pathologic transpyloric duodenogastric reflux

FP 40

9.20 Intrathoracic periesophageal fundoplication for short esophagus

FP 41

9.30 Mini-laparoscopic versus conventional laparoscopic cholecystectomy: a prospective study – preliminary results

FP 42

9.40 Evaluation of the 7th UICC TNM classification for esophageal cancer using a single centre database

FP 43

9.50 Herniation of an abdominal antireflux fundoplication into the chest: what does it mean?

FP 44

10.00 Coffee Break
Friday, 13th May 2011

Free paper session  
Albert II Room

Moderators:  I. Fourneau (Leuven, Belgium)  
H. Van Damme (Liège, Belgium)

8.20 Preventing an open window thoracostomy in postpneumonectomy empyema  
FP 45
J. Lesaffer, Ph. Nafteux, H. Decaluwe, L. Depypere, G. Dekker, W. Coosemans,  
D. Van Raemdonck, P. De Leyn (Leuven, Belgium)

8.30 How to manage occluded infra-inguinal bypass grafts?  
FP 46
C. Palmen, H. Van Damme, J.O. Defraigne (Liège, Belgium)

8.40 Can careful clinical examination and risk assessment prior to native arterio-venous  
fistula creation help to improve maturation rates?  
FP 47
S. Verest, K. Daenens, S. Houthoofd, I. Fourneau (Leuven, Belgium)

8.50 Banking of cryopreserved arterial allografts. Assessment of 20 years activity of  
European Homograft Bank (EHB) in Brussels  
FP 48
R. Jashari, Y. Fan, B. Van Hoeck (Brussel, Belgium)

9.00 Laparoscopic omentoplasty as treatment for mediastinitis after median sternotomy  
(video)  
FP 49
K. Van Bael, K. De Brabandere, F. Wellens, G. Delvaux (Brussel, Belgium)

9.10 Starting up port-access surgery for mitral valve pathology, is it safe? A critical review of  
the first 140 patients at the Leuven University Hospital  
FP 50
H. De Praetere, M. Pettinari, F. Rega, P. Herijgers (Leuven, Belgium)

9.20 VASCO  
FP 51
S. Delalieux, M. Van Betsbrugge, B. Thomas, R. Deleersnijder (Antwerpen, Belgium)

9.30 Are adverse postoperative events after AVR preventable by early referral?  
FP 52
W. Mistiaen, Ph. Van Cauwelaert, Ph. Muylaert (Antwerpen, Belgium)

9.40 Totally laparoscopic aortobifemoral bypass for occlusive aorto-iliac disease: results of  
a single centre over 7 years  
FP 53
S. Bruls, J. Quaniers, J.P. Lavigne, H. Van Damme, J.O. Defraigne (Liège, Belgium)

9.50 Early experience with single-port laparoscopic Nissen fundoplication in a child  
FP 54
K. Vanderlinden, K. De Vogelaere, N. Van de Winkel, G. Delvaux (Brussel, Belgium)

10.00 Coffee Break

1.00 General Assembly BSBS  
Albert II Room
1.30 General Assembly BSHBPS  
Albert Hall
3.30 General Assembly BGES  
Albert Hall
3.30 General Assembly BSSO  
Boudewijn Room
7.00 General Assembly Belsurg  
Albert Hall
Friday, 13th May 2011

**Plenary session**

**Albert Hall**

*Quality of care: can quality indicators help?*
Moderators:  
* B. Carly (Brussel)*  
* D. Burnon (Bruxelles)*  

10.30 Day Surgery Centers: Quality and safety in surgery and organisation  
* G. Bogaert (Leuven, Belgium) BAAS*  

11.00 Quality care in surgery: Can quality indicators be the clue? Procare project quality indicators  
* W. Ceelen (Gent, Belgium) on behalf of Procare BSCR*  

11.30 Criteria of excellence in bariatric Surgery: how to implement it in Belgium  
* L. Lemmens (St Niklaas, Belgium) Be SOMS*  

12.00 Quality assurance in breast surgery  
* M. Vanhoey (Brussel, Belgium) BSBS*  

12.30 How to define complications and outcome measures in HBP Surgery  
* M. Lesurtel (Zürich, Switzerland) BSHBPS*
## Programme

### Friday, 13th May 2011

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.00</td>
<td>Cholecystectomy for asymptomatic gallbladder stones: when?</td>
<td>J.L. Jourdan (Liège, Belgium)</td>
</tr>
<tr>
<td>2.20</td>
<td>Is there any indication of prophylactic cholecystectomy in abdominal surgery? The example of obesity surgery</td>
<td>G. Hubens (Antwerpen, Belgium)</td>
</tr>
<tr>
<td>2.40</td>
<td>Single port access Cholecystectomy: is there a better outcome?</td>
<td>Ph. Malvaux (Tournai, Belgium)</td>
</tr>
<tr>
<td>3.00</td>
<td>NOTES for biliary surgery: where are we in 2011?</td>
<td>K. S. Lehmann (Berlin, Germany)</td>
</tr>
<tr>
<td></td>
<td>Coffee Break</td>
<td></td>
</tr>
<tr>
<td>4.00</td>
<td>New staging classification for hilar cholangiocarcinoma</td>
<td>M. Lesurtel (Zürich, Switzerland)</td>
</tr>
<tr>
<td>4.30</td>
<td>Management of common bile duct stones during laparoscopic cholecystectomy</td>
<td>B. Topal (Leuven, Belgium)</td>
</tr>
<tr>
<td>4.50</td>
<td>Bile duct injury: how to get out of this mess?</td>
<td>V. Lucidi (Bruxelles, Belgium)</td>
</tr>
<tr>
<td>5.10</td>
<td>Incidental gallbladder cancer: what to do?</td>
<td>C. Hubert (Louvain-en-Woluwe, Belgium)</td>
</tr>
<tr>
<td>5.30</td>
<td>Tips &amp; Tricks in single port access cholecystectomy</td>
<td>S. De Gendt (Gent, Belgium)</td>
</tr>
<tr>
<td>5.40</td>
<td>Intraoperative imaging during cholecystectomy</td>
<td>C. Bertrand (Haine-Saint-Paul, Belgium)</td>
</tr>
<tr>
<td>3.30</td>
<td>General Assembly BGES</td>
<td>Albert Hall</td>
</tr>
<tr>
<td>3.30</td>
<td>General Assembly BSSO</td>
<td>Boudewijn Room</td>
</tr>
<tr>
<td>7.00</td>
<td>General Assembly Belsurg</td>
<td>Albert Hall</td>
</tr>
</tbody>
</table>
Friday, 13th May 2011

Belgian Society of Surgical Oncology
Belgian Association of Surgical Trainees.

Oncology
Moderators: P. Willemse (Antwerpen, Belgium)
            Th. Martens (Gent, Belgium)

2.00 Pharmacologic rationale for intraoperative intraperitoneal and intravenous chemotherapy in peritoneal carcinomatosis patients
K. Vanderspeeten (Genk, Belgium)

2.20 Basic knowledge on gist tumours
M. Debiec-Rychter (Leuven, Belgium)

2.50 As surgeons, how do we deal with neoadjuvant treatment?
W. Ceelen (Gent, Belgium)

3.30 Coffee Break

European Working time regulation (EWTR)
Moderators: J.M. Weerts (Liège, Belgium)
            K. De Brabandere (Brussel, Belgium)

4.00 Introduction and description of the 12/12/2010 law
R. Detry (Louvain-en-Woluwe, Belgium)

4.10 Vision of the Collegium Chirurgicum
D. Claes (Gent, Belgium)

4.25 Vision of the university hospital surgeon
P. De Leyn (Leuven, Belgium)

4.40 EWTR in the UK and in Europe
C. Marron (Belfast, U.K.)

5.10 Round table
How to cope with training
J. Weerts (Liège, Belgium)
F. Swinnen (Veurne, Belgium)

3.30 General Assembly BGES
3.30 General Assembly BSSO
7.00 General Assembly Belsurg

Albert Hall
Boudewijn Room
Albert Hall
Friday, 13th May 2011

Belgian Society of Vascular Surgery

Femoropopliteal disease
Moderators: R. Verhelst (Louvain-en-Woluwe, Belgium)
            F. Vermassen (Gent, Belgium)

2.00 Successful PTA after unsuccessful bypass
S. Van Wiemeersch, J. Hendriks, P. Lauwers, M. Hertoghs, P. Van Schil (Antwerpen, Belgium)

2.18 Long SFA diseases: which attitude in octogenarian patients?
F. Kanyanzira, C. Caravagio, F. Verdy, R. Verhelst, P. Astarci (Louvain-en-Woluwe, Belgium)

2.36 Can we save the surgical bypass?
B. Moors, R. Vossaert, M. Martens (Zottegem, Belgium)

2.54 Recanalisation of SFA: how far to go?
M. Dubois, J. Verbist, P. Peeters (Bonheiden, Belgium)

3.12 Infectious aneurysm of the popliteal artery: how to treat?
S. Yogeswaran, P. Stabel (Turnhout, Belgium)

3.30 Coffee Break

Aortic and supra-aortic disease
Moderators: K. Deloose (Tienen, Belgium)
            P. Astarci (Louvain-en-Woluwe, Belgium)

4.00 Abdominal aortic aneurysm and horseshoe kidney: are there any therapeutic implications?
L. Ceulemans, J. Duchateau, F.M. Vanhoenacker, J. De Leersnyder (Duffel, Belgium)

4.18 A rare disastrous complication after endovascular abdominal aortic aneurysm repair
M. Janssen, K. Keirse, B. Joos, J. Verbist, P. Peeters (Tienen, Belgium)

4.36 Endoleakage after endovascular thoracic aortic aneurysm repair
J. Munc, G. Callebaut, I. De Quin, C. Goffin, Y. Dernier, P. Waulhy, B. Bellens (Bruxelles, Belgium)

4.54 Pseudoaneurysm of the carotid bifurcation: a rare complication after carotid endarterectomy
C. Assou, A. Therasse, F. Ferdin (Mons, Belgium)

5.12 Cutting the Viabahn, and the aneurysm. Endovascular treatment: is it always it?
I. Bouckenooghe, I. Van Herzeele, A. Derom, F. De Ryck, F. Vermassen (Gent, Belgium)

Programme
Collegium Chirurgicum Boudewijn Room

Omgaan met medische klachten is een bijna voltijdse taak geworden binnen de ziekenhuizen. De specialisistische geneeskunde zal in de toekomst nog meer met vragen worden geconfronteerd door de toepassingsregels van de in Februari vorig jaar gepubliceerde wet op de medische ongevallen en de ‘no fault’ regeling. We hebben geprobeerd door het uitnodigen van eminente sprekers enkele praktische thema’s aan te snijden rondom de nieuwe wet in het bijzonder en het omgaan met medische klachten in het algemeen.

Introduction
Dans le monde hospitalier, le traitement des dossiers d'accidents médicaux est devenu une occupation pratiquement à temps plein. Depuis l’entrée en vigueur de la loi publiée en février 2010 portant sur les accidents médicaux et le règlement ‘no fault’, la médecine spécialisée se voit de plus en plus confrontée à de nombreuses questions. Des orateurs éminents aborderont quelques thèmes pratiques, non seulement au sujet de la nouvelle loi mais également sur la matière de gérer ces accidents médicaux.

De wet op medische ongevallen
La loi relative aux accidents médicaux
Moderators: D. Claes (Gent, Belgium)
B. Mansvelt (Haine-St-Paul, Belgium)

10.00 De nieuwe vergoedingsregeling voor slachtoffers van medische ongevallen
De nieuwe wet zal ontegensprekelijk nog meer stringente gedragsregels opleggen in verband met het behandelen van medische ongevallen. Professor Ingrid Boone zal het juridisch kader schetsen en de nieuwe invalshoeken ontstaan door deze wet praktisch uitleggen.

Le nouveau règlement portant sur l’indemnisation des accidents médicaux
La nouvelle loi exigera indiscutablement des règles de conduites encore plus contraignantes quant à la gestion des accidents médicaux. Le Professeur Ingrid Boone dressera un tableau juridique et expliquera les nouvelles approches pratiques découlant de cette loi.
I. Boone (Gent, Belgium)

10.30 The relationship between organisational communication and perception
Saturday, 14th May 2011

H. Marynissen, spécialiste dans la technologie de la communication, enseigne actuellement cette matière à la Bedford Cranfield School of Management en Angleterre. Il nous expliquera principalement comment une certaine attitude peut améliorer la communication avec la famille et le patient et ainsi faciliter le contact lors d’un accident médical éventuel.

H. Marynissen (Gent, Belgium)

11.00 Schaderegeling bij medische ongevallen in de praktijk
P. Plas is administratief directeur bij n.v. Concordia s.a. Als verzekerder wil hij in zijn onderwerp zo goed mogelijk beschrijven hoe men omgaat met klachten tegenover de verzekerder en hoe men deze in nauwe samenwerking kan behandelen.

L’indemnisation des accidents médicaux dans la pratique
P. Plas est directeur administratif chez s.a. Concordia n.v. Son exposé sera dédié à la manière dont les plaintes à l’encontre de l’assuré sont traitées et comment, en étroite collaboration avec celui-ci, elles peuvent être traitées.

P. Plas (Brussels, Belgium)

11.30 Panel discussion

12.00 Einde van de zitting
Fin de la séance
Royal Belgian Society for Surgery

Board RBSS
Société Royale Belge de Chirurgie (asbl)
Koninklijk Belgisch Genootschap voor Heelkunde (vzw)
Royal Belgian Society for Surgery (npma)

Candidates
CONSEIL D’ADMINISTRATION – BEHEERRAAD – BOARD

2011-2012
PROPOSÉ PAR LE CONSEIL D’ADMINISTRATION
VOORGESTELD DOOR DE BEHEERRAAD
PROPOSED BY THE BOARD

Président – Voorzitter – President  BERTRAND, Claude
Vice-Président – Ondervoorzitter – Vice-President  GYS, Tobie
2ème Vice Président – 2e Ondervoorzitter – 2nd Vice-President  KOLH, Philippe
Secrétaire Général – Secretaris-Generaal – Secretary-General  LAMOTTE, Jan
Secrétaire Général Adjoint – Adjunct Secretaris-Generaal – Assistant Secretary-General  BURNON, Dany
Secrétaires des Séances – Secretarissen der Zittingen – Sessions’ Secretaries  HENDRIKS, Jeroen
DE ROOVER, Arnaud
Secrétaire de Rédaction – Redactiesecretaris – Editor  CEELEN, Wim
Secrétaires de Rédaction adjoint – Adjunct Redactiesecretarissen – Assistant Editors  DETRY, Olivier
LERUT, Jan
Trésorier – Schatbewaarder – Treasurer  DUINSLAEGER, Marc
Royal Belgian Society for Surgery

Belgian Surgical Weeks
PREVIOUS, PRESENT AND FUTURE BELGIAN SURGICAL WEEKS

1st BSW 27-28-29th April 2000
Theme: Minimally Invasive Surgery
President: M. Meurisse
Venue: Knokke

2nd BSW 3-4-5th May 2001
Theme: Evidence Based Surgery
President: H. Bostoen
Venue: Knokke

3rd BSW 2-3-4th May 2002
Theme: Surgical Pitfalls and Complications
President: R. Sacré
Venue: Knokke

4th BSW 1-2-3rd May 2003
Theme: Tomorrow’s surgery seen today. From cell engineering to innovative techniques and transplantation
President: J.P. Squifflet
Venue: Ostend

5th BSW 6-7-8th May 2004
Theme: Quality of Surgical Care in Belgium
President: F. Penninckx
Venue: Ostend

6th BSW 28-29-30th April 2005
Theme: Quality of Life in Surgery
President: J. Van de Stadt
Venue: Ostend

7th BSW 4-5-6th May 2006
Theme: The Role of the Surgeon as a Member of a Multidisciplinary Team
President: G. Hubens
Venue: Ostend

8th BSW 2-3-4-5th May 2007
Theme: Decision making in Surgery
President: D. Claeyts
Venue: Ostend

9th BSW 30th April-1-2-3rd May 2008
Theme: The Place of Guidelines in Daily Surgery
President: J. Weerts
Venue: Ostend

10th BSW 29-30th April-1-2nd May 2009
Theme: Surgeons Collaborating in the Patient’s Best Interest
President: D. Van Raemdonck
Venue: Ostend
11th BSW  28-29-30th April-1st May 2010
Theme: Diminishing role of Surgeons in Emergency and Disaster Situation?
President: L. Michel
Venue: Ostend

12th BSW  11-12-13-14th May 2011
Theme: Good Clinical Practice and Right Indications in Surgery: a matter of Ethics or Economics
President: B. Carly
Venue: Ostend
Royal Belgian Society for Surgery

Abstracts of Free Papers
FP1. — SURGICAL SIMULATION : LEARNING A WIDE VARIETY OF SURGICAL PROCEDURES IN A SHORTER INTERVAL.
H. De Praetere, P. Sergeant.

To evaluate the need of surgical simulation on training in surgery, to differentiate different degrees of fidelity and to integrate simulation and the science of learning in the daily clinical practice of the scholar and experienced surgeon. Critical review of the literature and extensive translational application in complex surgical procedures. Constructivism and Bloom’s taxonomy interface with the relation between psychomotoric and cognitive skills. Training on a simulator reduces the learning curve in the real world. Simulation is integrated in a curriculum, based on educational objectives, deconstruction into teachable components, validated metrics and assessment tools. Experts define benchmarks, which work as end points. Access to a higher level of difficulty is only possible after reaching a certain proficiency and a certain consistency. Novices and experts need different levels of fidelity in simulation. Low fidelity is of critical importance in skill generalization, where skill transfer is mostly better served by high fidelity simulators. By using simulation, training is not dictated by random case exposure, but rather by curricular design and is so better suited for teaching. Warming-up is suggested for rare technical issues. Simulation reduces surgical stress. In light of the European Working Hour Directives, surgical simulation can cope with economical, safety and teaching issues. Training in vivo is replaced by training in vitro, training through saturation by an active process. In the era of evidence-based medicine, we need to evolve towards an evidence-based learning. Psychomotor skill achievement is only a small part of surgical training but it can make cognitive learning more easily.

FP2. — ALLOCATION IN LIVER TRANSPLANTATION : IS THE SICKEST-FIRST PRINCIPLE JUSTIFIED?

Liver transplantation (LTx) is the standard treatment for patients suffering from irreversible liver disease. The widening gap between the limited supply and the increase demand of liver grafts has led to prioritization of the LTx candidates according to their MELD (Model of End Stage Liver Disease)-score. In this method more critical patients are given priority to transplantation. However, this allocation system is questioned within Eurotransplant because LTx in “high MELD” patients may result in increased postoperative mortality, and subsequently in the futile use of scarce liver grafts and resources. Aim : To determine the impact of MELD on short term post-LTx mortality/survival and hospital/ICU stay. All patients transplanted at one centre (January 2006-to-September 2010) were analyzed. MELD was determined immediately pre-LTx and patients were categorized according to MELD-score (MELD 6-19, MELD 20-24, MELD 30-34, and MELD > 35). For each category, the short term survival and the length of hospital stay were analyzed. During the study period 221 isolated LTx for non-acute liver disease were performed. Mean MELD-score was 16.4 (+/- 8.8), mean age was 55.7 (+/- 13.8). No correlation between MELD-score and 3 months survival / mortality was observed. However, the one-year mortality and ICU/hospital stay was higher if MELD-score was > 20, while there was no effect among the various MELD-classes above 20. MELD-score has no impact on early post-LT mortality but affects 1-year patient survival and correlates with resource utilization. Nevertheless, MELD-based allocation seems justified considering the favourable results reached even in (very) high MELD recipients and the extremely dismal prognosis without LTx.
FP3. — VARIATION OF THE KIDNEY GRAFT VESSELS DURING LAPAROSCOPIC LIVING DONOR NEPHRECTOMY (LLDN): SURGICAL MANAGEMENT AND IMPACT ON EARLY GRAFT FUNCTION.
A.-D. Hoang, D. Mikhalski, A. Buggenhout, P. Loi, N. Broeders, D. Abramowicz, V. Donckier.
Hôpital Erasme, Bruxelles, Belgium.

In living donor kidney transplantation (LDKT), the anatomic variations of the donor renal vessels may constitute a relative contraindication, particularly for LLDN. The aim of our study was to review our results of LDKT when anatomical variations were present.

LDKT performed since 2004 were reviewed. We analyzed the incidence and the type of anatomic variations of the donor renal vessels and the techniques used for vascular reconstruction. We compared graft outcomes in normal donor anatomy (NDA) versus abnormal donor anatomy (ADA) groups.

53 LDKT using LLDN were reviewed, vascular reconstruction were performed in 28 cases (53%) included 20 arteries and 8 veins. Following number of the renal arteries were presented respectively after left and right LLDN: 1 artery (N = 23 and N = 10), 2 arteries (N = 8 and N = 4), 3 arteries (N = 3 and N = 2), 4 arteries (N = 3 and N = 0). The anastomosis of the polar artery with principal renal graft artery (N = 14), creation of the common arterial trunk (N = 5), use of the recipient inferior epigastric artery (N = 2) were done. The donor right renal veins were extended using donor gonadic vein (N = 6); One left renal vein – with saphenous vein. One orthotopic left kidney was performed. No differences were observed between NDA and ADA for operative duration, cold and warm ischemic time, urological complications and creatinine levels. The primary graft non function and the arterial reversible thrombosis appeared in one case ADA and NDA respectively.

Anatomic variations of the donor renal vessels are frequent. Adequate surgical management, i.e. back table vascular reconstruction, allows obtaining similar results than those observed in case of normal anatomy and increases the donor pool.

FP4. — OUTCOME AFTER LIVER TRANSPLANTATION USING DONATION AFTER CARDIAC DEATH DONORS: A SINGLE-CENTRE EXPERIENCE.
UZ Gasthuisberg, Leuven, Belgium.

Liver Transplantation using Donation after Cardiac Death donors are increasingly used to expand the donor pool. But a DCD liver is considered a risk factor for poor outcome and there are concerns regarding short & long-term outcome of DCD LTx. We therefore reviewed the results of DCD LTx at our centre.

Between 2003 and 2010, 30 DCD LTx were performed. Medical records of DCD donors and recipients were retrospectively reviewed. Donor demographics, LTx indications, postLTx peak transaminase, incidence of primary non-function, biliary complication, and graft rejection were analyzed. Patient/graft survival was examined and compared to outcome using brain dead donors.

Of 30 DCD LTx, 25 livers were locally procured. Mean donor age was 47.3 yo. Mean warm ischemia time was 23 ± 11’. Mean cold ischemia time was 415 ± 104’. Mean recipient age was 58 yo, including 22 males and 8 females. Mean labMELD score was 17. Post-LTx AST peak was 1712 IU/L. No grafts were lost to primary non-function. Reasons for graft loss were hepatic artery thrombosis, ductopenic rejection and diffuse intrahepatic biliary strictures.10 patients developed biliary complications. Follow-up ranged from 1 to 93 mths. Actuarial 1, 3, & 5-yr patient survival was 92, 83 and 83%, and 1, 3, & 5-yr graft survival was 89, 79, and 79%, respectively.

Despite substantial ischemic injury short- & long-term survival of DCD LTx is comparable to LTx from brain dead donors. Rapid donor surgery, careful donor and recipient selection, short warm and cold ischemia times are key factors to optimize outcome after DCD LTx.
FP5. — LIVING DONOR KIDNEY TRANSPLANTATION IN A SINGLE CENTRE : 45 YEARS’ EXPERIENCE.

Cliniques Universitaires St. Luc, Louvain-en-Woluwe, Belgium.

The aim was to report long-term results of kidney transplantation (TP) from living donor from a single centre and analyze factors affecting outcomes.

The analysis includes 461 consecutive patients transplanted between 1963 and 2008 with ABO-compatible kidneys. In 145 patients, transplant procedures were performed before the advent of CNI-based immunosuppression (IS). Data were analyzed using Kaplan-Meier survival plots and Cox proportional hazards regression analysis.

At 1, 5, 10 and 20 years after grafting, overall patient survival was 96%, 91%, 84% and 69%, and graft survival 92%, 78%, 65% and 44%, respectively. The relative risk of acute rejection (AR) was smaller in the group of patients treated with CNIs (HR : 0.46, 95% CI = [0.3,0.6]). It was not influenced by the origin of the graft, i.e. related or unrelated donors. One and two class I HLA antigen mismatches (HLA-mms) were associated with increased risk of AR : 1.8 (95% CI = [1.1,3.1]) and 2.1 (95% CI = [1.3,4]) respectively, as compared to no class I HLA-mm. Graft survival was affected by the occurrence of at least one AR episode (HR = 2.5, 95% CI = [1.8,3.4]), at least one class I HLA-mm (HR = 2.3, 95% CI = [1.3,3.9]) and, in patients transplanted without CNI, by donor abnormal BMI (HR = 2.0, 95% CI = [1.1,3.9]). Patient survival was negatively impacted by at least two class I HLA-mms (HR = 2.9, 95% CI = [1.4,6.3]), grafts from unrelated donors (HR = 2.3, 95% CI = [1.4,3.8]), and pre-transplant dialysis in patients grafted after 1986 and receiving CNI-based IS.

Kidney transplantation from living donors offers markedly extended graft survival over time. CNI treatment has been shown to be a major factor in prevention of AR. AR and HLA-mm negatively affect graft survival.

FP6. — NEUROMONITORING IN THYROID SURGERY.

F. Charara, D. Dequanter, P. Paulus, M. Shahla, Ph. Lothaire.
C.H.U., Charleroi, Belgium.

During thyroidectomy, the greatest care must be exercised to preserve the integrity of the recurrent laryngeal nerve (RLN). Palsy rate represents clearly a key performance indicator of thyroid surgery quality management. We retrospectively evaluated the clinical relevance of the intraoperative monitoring of the RLN.

Between march 2009 and October 2010, 237 thyroidectomies were performed; intraoperative neuromonitoring was registered for 135 patients. Complete clinical (pre-and postoperative laryngoscopy) and monitoring data were available for only 175 RLN (88 right, 87 left), mainly due the learning curve concerning the monitoring.

For the 237 patients, 15 unilateral post operative transient pareses were identified (6,3%) without any permanent paralysis; complete clinical and monitoring data were available only for 8. The intraoperative electromyography (latency and amplitude) of 167/175 RLN showed no difference of the signal of the RLN before and after the dissection; postoperative laryngoscopy confirmed normal postoperative vocal cord mobility. In contrast, in 4 of the 8 cases of nerve injury, there was no signal of the RLN after resection; in 1 case, a drastic diminution of the amplitude was noted and in the last 3 cases, no difference was observed concerning the registered signal of the RLN but well of the vagus nerve.

Intraoperative neuromonitoring of the RLN doesn’t help to minimize nerve injury; its first interest is to help identify and dissect the RLN; the second interest is prognostic with a high negative predictive value and in our study a good positive predictive value if the vagus nerve is systematically stimulated.
FP7. — A NEW TECHNIQUE FOR SEVERE INFANTILE HYPERTROPHIC PYLORIC STENOSIS.
Y. Alalayet, M. Miserez, M. Khizer, M. Khan Abdul.
1King Saud Medical City, Riyadh, Saudi Arabia, 2U.Z. Gasthuisberg, Leuven, Belgium.

Ramstedt’s pyloromyotomy for management of Infantile Hypertrophic Pyloric Stenosis (IHPS) is successful for almost a hundred years. Severe cases of hypertrophy suffer from post operative vomiting and slow weight gain for sometime. We define here a new technique which deals with the pylorus and may offer better results for this common surgical problem as it gives immediate wide pyloric canal

A Prospective study of 40 patients was carried out over a period of 3 years beginning in January 2005. Information on patient operative time, complications, postoperative vomiting and weight gain was collected. Patients were divided into 2 equal groups. Statistical assessment was done using Student’s t test.

Significant difference was noted in the vomiting during the first postoperative week between AP (Alayet’s pyloromyotomy) vs RP (Ramstedt’s pyloromyotomy) (2.7 +/- 0.98 days vs 3.45 +/- 0.94 days P = 0.018) and gain in weight during the first 10 postoperative days (245.50 +/- 24.17 gms vs 225.25 +/- 21.61 gms P = .008) respectively.

Alayet’s Pyloromyotomy seems to be a good technique for the surgical management of IHPS. It offered a better functional outcome in terms of postoperative vomiting during the first postoperative week and weight gain during the first 10 days in our initial series while having a safety profile similar to Ramstedt’s Pyloromyotomy.

FP8. — THE TROUBLE WITH INCISIONAL HERNIAS – DOES LAPAROSCOPY REALLY DECREASE THE RISK FOR WOUND COMPLICATIONS FOLLOWING COLORECTAL SURGERY?
N. Geurts, Th. Lafullarde, T. Gys.
A.Z. St. Dimpna, Geel, Belgium.

Previous studies established the long-term benefit of laparoscopic colorectal surgery compared to open surgery. Despite the advantages of decreased postoperative morbidity and length of hospital stay, wound complications still occur. This study aims at assessing incisional hernia (IH) rates following laparoscopic colorectal surgery and at evaluating the impact of risk factors on their development.

In this retrospective study, data of 192 patients were included into a database and statistically analyzed for correlations. Parameters included were age at the time of surgery, sex, type of colorectal resection, indication for surgery, specimen extraction site, the occurrence of incisional hernia and/or wound infection (WI) and duration of follow-up.

One hundred and ten (57.3%) men and 82 (42.7%) women (median age 66 years) were included in our database. We found an IH rate of 7.8%, 80% of IHs occurred at the specimen extraction site. The WI rate was 8.3%. Statistical analysis revealed no significant correlation between the development of IH and either type of surgery, indication and extraction site. Moreover, in our series, WIs were not found to be a predictive factor for the development of IHs.

In literature, IH rates following open colorectal resection range from 4 to 20%. Our data show comparable results, suggesting that laparoscopy doesn’t have a beneficial impact on the development of WIs and IHs. Although IHs are often asymptomatic or cause little discomfort because of the smaller incision, surgeons should take the necessary measures – such as adequate facial closure and post-operative wound care – to prevent their development.
FP9. — GOOD CLINICAL PRACTICE IN INGUINAL HERNIA REPAIR: WHY NOT BACK TO BASICS?

B. Gys1, T. Smeenk2, Th. Lafullarde1, T. Gys2.

1 U.Z.A., Antwerp, Belgium, 2 A.Z. St. Dimpna, Geel, Belgium.

Guidelines on inguinal hernia treatment by Endoscopic Repair (ER) or Lichtenstein Repair (LR) remain fascinating. In 2009 the EHS-guidelines recommended that ER is the most cost-effective approach. Less favourable for ER are studies illustrating that cost-analysis during follow-up increased compared with LR. However the drawback to "reintroduce" routinely LR could be data it is more associated with postoperative discomfort. In searching to minimize this, alternative methods of mesh fixation are developing. Recent data suggest a beneficial effect of a mesh with self-gripping properties (PG) (ProGrip, Covidien). The aim of this study is to evaluate patient satisfaction and clinical experience using this mesh in LR.

We studied 350 hernia repairs in 315 patients. A standard LR using a PG mesh was performed. Evaluation was performed at discharge, after 1 and 4 weeks. Afterwards patients were instructed to contact the service in case of a problem. Follow-up 6-30 months

No intra-operative complications. In evaluating patient satisfaction, minor discomfort was reported by 44 patients. One hundred and two patients did not use analgesics, 194 patients less than 48 hrs. Eight patients visited with a local numbness/discomfort (2.3%) and one with a recurrence (0.3%).

These results suggest that the use of a self-gripping mesh is a highly qualitative technique with an excellent patient satisfaction rate. It is not unimaginable that this "basic" repair may become the preferred method for inguinal hernia treatment and earning it’s place in so called good clinical practice.

FP10. — THE PROGNOSTIC SIGNIFICANCE OF MUCINOUS DIFFERENTIATION IN COLORECTAL CANCER: A SYSTEMATIC REVIEW AND META-ANALYSIS.

J. Verhulst, W. Ceelen.

U.Z. Gent, Gent, Belgium.

The prognostic significance of mucinous colorectal carcinoma (MAC) remains controversial. We reviewed the prognostic significance of mucinous differentiation in colorectal cancer (CRC).

A systematic web-based search was performed using Web of Knowledge and Medline. Articles describing cohort studies, case-control studies or cross-sectional studies comparing survival in patients with MAC and adenocarcinoma not otherwise specified (AC) were included. Data on first author, year of publication, country, number of patients included, prevalence of MAC, % stage IV disease, % disease located in the proximal colon, mean age at presentation, % male patients and 5-year overall survival were extracted from individual studies. A fixed-effects meta-analysis model was used for analysis. The primary outcome was survival expressed as the hazard ratio (HR). Differences between categorical outcome parameters were quantified using the risk ratio (RR) and corresponding 95% confidence interval (95% CI).

Forty-four studies, including 222,256 patients, were included. The risk ratio for proximal disease was 1.55 [95%CI 1.53-1.58]. Mucinous differentiation was less frequent in males (RR 0.93 [95% CI 0.91-0.94]). Interestingly, the prevalence of stage IV disease was similar in MAC and AC (RR 0.99 [95% CI 0.96-1.02]). Thirty-five articles were included in the survival analysis. The hazard ratio (HR) was 1.05 [95% CI 1.02-1.08] (P = 0.0001) with a worse survival in MAC. MAC more often originates from the right colon, and is less frequent in males. We did not identify a difference in proportion of stage IV patients at presentation. Mucinous differentiation results in a 2%-8% increased hazard of death, which persists after correction for stage.
FP11. — NEW APPROACH IN TRANSAAL ENDOSCOPIC MICROSURGERY.
Hôpital de Jolimont, Haine-Saint-Paul, Belgium.

The transanal endoscopic microsurgery (TEM) of rectal tumours developed by Buess remains of limited use because of
the complexity of the learning curve and the expense of this specialised equipment. We propose an alternative technique
by using the SILSTM Port device (Covidien) originally intended for single incision laparoscopic surgery. It allows
the same visibility and CO2 insufflation, the possibility to manipulate standard laparoscopic instruments and could be less
traumatic for the anal sphincter. We report our first experience with this device.

Eleven patients. Mean age 71 years (50-84). Fourteen lesions: 3 at < 5 cm from the anal verge, 7 between 5-9 cm, 3 at
10 cm and 1 at 13 cm; 2 anterior, 1 antero-lateral and 11 postero-(lateral); 8 adenomas, 4 high-grade dysplasia or in situ
carcinomas and 2 invasive carcinomas.

Mean operative time 79’ (40-180). The rectal wall was completely resected in 13/14 lesions and closed in 3 cases. The
resection was complete with histological free margin in 13 cases. Among the 8 benign lesions, 2 up-staging as invasive
carcinoma; among the 4 high-grade dysplasia or in situ carcinoma, 1 up-staging as in situ carcinoma and 2 as invasive
carcinoma. Mean hospital stay was 4 days. Complications: 1 bleeding at J15 (no treatment). All the patients had the
same continence than before surgery.

In this first experience, the use of SILS for TEM offered the same advantages than conventional and expensive material
of Buess. No continence trouble and no learning curve effect were noted.

FP12. — PELVIC EXENTERATION: A RETROSPECTIVE STUDY OF A PERSONAL SERIES OF
106 PATIENTS.
I. De Wever.

Between 1980 and 2008 pelvic exenteration has been performed on 106 patients, 87 female and 19 male, with a medi-
an age of 59 years (30 – 80 yr). The indications were malignancies of gynaecological organs in 69 cases, of intestinal
tract in 29; 6 urological and 2 very advanced skin tumours. For only 21 patients the exenteration was performed as the
primary treatment, for the remaining 85 patients it was salvage therapy for persistent or recurrent tumours.

The type of exenteration was a total infralevatoric one in 47 cases, total supravelatoric in 39, anterior in 14 and posteri-
or in 6. For 55 patients a resection beyond the classical limits was involved. The reconstruction involved incontinent
urinary derivation, omentoplasty, colo-anal anastomosis and temporary loop colostomy.

Postoperative complications were mainly related to high doses of radiotherapy and the postoperative mortality of 5% did
occur before 1994. Since 1995 none of the 44 patients has been lost. In the follow-up the cause of death was tumour
progression in 51 and unrelated to tumour in 15 patients. Radicality of resection was the most significant prognostic
factor with an average survival of only 24 months after R1 resection and a long term cure rate of 47% after R0 resection.

Pelvic exenteration still has an important place in oncology because of its curative potential in selected advanced and
recurrent pelvic tumours if R0 resection can be obtained.
FP13. — ANASTOMOTIC LEAKAGE AFTER LOW ANTERIOR RESECTION FOR RECTAL CANCER: OUR EXPERIENCE.
A.Z. Middelheim, Antwerp, Belgium.

The objective of this study is to review our experience with low anterior resection for rectal cancer. Prospectively data were collected for all patients with rectal cancer who underwent low anterior resection between January 2001 and September 2010 in the Middelheim General Hospital, Antwerp. All patients were treated according the hospital rectal cancer protocol and underwent total mesorectal excision (TME) for rectal cancer with double stapled side-to-end anastomosis. A temporary diverting stoma was created in high-risk cases (after neoadjuvant radiotherapy, difficult preoperative dissection, in obstructing tumours).

A total of 101 patients were included in this study. In 54 cases a temporary diverting stoma was constructed (53.5%). Sixty patients were treated with neoadjuvant radiochemotherapy (59.4%). Anastomotic leakage was seen in 26 patients (25.7%), with a need for re-operation in 11 patients. Five patients died due to septic complications (5%). There was no effect of neoadjuvant radiotherapy on postoperative leakage (p = 0.86). The presence of a diverting stoma did not have an effect on the occurrence of anastomotic leakage. It did however diminish the clinical impact of leakage with a significantly lower re-operation and mortality rate (p < 0.05).

In this series the leakage rate after low anterior rectum resection is 26%. There is no relationship between preoperative radiotherapy and anastomotic leakage. The construction of a temporary diverting stoma did not affect the leakage rate, but the need for re-operation and the mortality was significantly lower in patients with a stoma.

FP14. — LEAKAGE AFTER TME FOR LOCALLY ADVANCED RECTAL CANCER DOES NOT COMPROMISE ONCOLOGICAL OUTCOME BUT RESTRAINS PATIENTS FROM ADJUVANT CHEMOTHERAPY.

Clinical anastomotic leakage (CAL) after TME-surgery has a major impact on postoperative morbidity and mortality. According to literature, anastomotic leakage could affect local recurrence and disease-free survival. This study aims to evaluate the effect of CAL on oncological outcome.

From a database with 356 patients with locally advanced rectal adenocarcinoma treated with neoadjuvant chemoradiotherapy, 295 patients with a colo-anal anastomosis were identified. Mean age was 64 years (range: 14-85 years) and 67% were males. Data on type of surgery, postoperative complications, disease recurrence and mortality were reviewed.

There were 23 clinical anastomotic leaks (7.8%), requiring re-intervention. There was no postoperative mortality. After a median follow-up of 4.7 years the 3-year overall survival rate was 94% and the disease-free survival rate was 83%. In the CAL-group, 18 patients (78%) remained free from disease. 2 patients (9%) developed a local recurrence and 4 patients (17%) developed systemic disease. No significant difference in overall survival and disease-free survival was observed comparing patients with CAL and patients without CAL: 94% and 79% versus 93% and 85%, respectively (p = 0.22 and p = 0.37). Fourteen out of 23 patients with CAL (61%) could not receive adjuvant chemotherapy versus 76 out of 272 patients (28%) without CAL (p = 0.002).

After neoadjuvant chemoradiotherapy and TME-surgery, the majority of patients without ileostomy who suffered from CAL could not receive adjuvant chemotherapy. In patients requiring adjuvant chemotherapy a temporary defunctioning ileostomy should be formed to decrease CAL. No impact on oncological outcome could be demonstrated, probably due to the small rate of CAL.
FP15. — OUTCOMES FOR CASE-MATCHED SINGLE PORT COLECTOMY ARE COMPARABLE WITH CONVENTIONAL LAPAROSCOPIC COLECTOMY.

With the introduction of single port surgery, the presumed advantages were improved cosmesis, decrease of pain and shorter length of stay. The aim of this study was to compare early outcomes of single port colectomy versus conventional laparoscopic colectomy.

All consecutive patients undergoing single port colectomy between January and June 2010 were identified from a prospective database. They were matched for age, sex, BMI, ASA score and type of resection to patients who had conventional laparoscopic colectomy. All perioperative data, analgesic requirement, pain scores and inflammatory response were compared using Wilcoxon signed-rank and McNemar tests.

Fourteen patients (5 men, 9 women; median age (IQR) 56 (30-73) years, BMI (IQR) 22 (20-24) kg/m²) underwent single port colectomy and were matched with a patient who had conventional laparoscopic colectomy. Median operating times, estimated blood loss, pain scores, analgesic requirement, inflammatory response and length of hospital stay were similar. Median increase in incision length was significantly higher in the single port group (P = 0.004), but maximal incision length for specimen extraction was comparable. There were no anastomotic leaks, wound infections and no 30-day readmissions.

Single port laparoscopic colectomy has similar outcomes to conventional laparoscopic colectomy with no apparent short-term benefits.

FP16. — INTRAPERITONEAL CHEMOTHERAPY: BEVACIZUMAB LOWERS INTERSTITIAL FLUID PRESSURE IN AN ANIMAL MODEL OF PERITONEAL CARCINOMATOSIS.
J. Verhulst, N. Van Damme, W. Ceelen.
U.Z. Gent, Gent, Belgium.

Intraperitoneal chemotherapy is indicated in selected patients with peritoneal metastasis. This technique has an additional effect on tumours compared to intravenous therapy due to the local direct penetration in the tumours. The interstitial fluid pressure (IFP) in the tumour limits this effect. Bevacizumab is an inhibitor of angiogenesis. The goal of this study was to analyze the effect of bevacizumab on IFP.

Athyric nude rats were used in this experiment. Fragments of a tumour grown in donor rats were implanted intraperitoneal in acceptor rats. Two weeks after implantation of tumour fragments a laparotomy was performed in order to treat the animals with an oxaliplatinum based (460mg/m² body surface) IPEC during 60 minutes. The animals were divided in six treatment groups. Two groups were treated with one dose of bevacizumab 5 mg/kg body weight one week before IPEC. Two groups were treated for seven consecutive days with bevacizumab (5 mg/kg) before IPEC. Two groups got no bevacizumab. Three groups were treated with hypertherm IPEC, while the three other groups were treated with a perfusate at 37°C. A total of thirty six rats were included.

One measurement was unstable and therefore excluded from analysis. At the start of IPEC, IFP was significant lower in the bevacizumab groups (P < 0.001). The difference between both bevacizumab groups was not significant (P = 0.248). Analysis by temperature of IPEC revealed no significant differences (P = 0.777)

For the first time, the influence of bevacizumab on IFP was demonstrated. A lower IFP can possibly improve the effect of IPEC in patients with peritoneal carcinomatosis. Further research is necessary in order to define the clinical importance of this finding.
FP17. — THD, FOUR YEARS’ EXPERIENCE.
Ch. Firket, A. Tabech, S. Ghewy, R. Algaba.
H.I.S. Bracops, Bruxelles, Belgium.

We submit a retrospective study of 239 patients operated for degree 2 and 3 haemorrhoids (Goligher) with the THD procedure (Trans Anal Haemorrhoid De-arterialisation). Regarding our previous results in terms of feasibility in one day care unit and patient’s satisfaction at one year (Belgian Surgical Week 2009), we analyse our results in terms of long follow up period patient satisfaction (4 years).
The THD device is equipped with a Doppler transducer to locate the terminal branches (6) of the superior rectal artery. Once identified, they are ligated above the pectineal line, and made to shrink by reducing the arterial flow to the haemorrhoids. Degree 2 haemorrhoids are ligatured and pexies are performed for degree 3 haemorrhoids.
Over 49 month’s period, 239 consecutive patients (143 males, 96 females) were treated. The median age was 49.118 degree 2 and 121 degree 3 were treated. The hospitalisation/day care ration was 42/197. The overall patient satisfaction (full and partial) is 97% at 3 months, 86% at 12 months, and 80% at 48 months. Among the patients who were not fully satisfied however, we note a reduction of complaints and of degree of haemorrhoidal status. We have in our series, for long term post operative results, 80% of good results in terms of patient satisfaction.
The THD procedure is a simple and effective technique. In our series we have 80% of good results at 4 years in terms of patient satisfaction.

FP18. — THE ROLE OF A SINGLE BOLUS OF ORALLY ADMINISTERED WATER SOLUBLE CONTRAST MEDIUM FOR SMALL BOWEL ADHESIVE DISEASE: A RETROSPECTIVE SINGLE CENTRE EXPERIENCE.
T. Oyen, M. Scheltinga, R. Roumen.
Maxima Medical Center, Veldhoven, The Netherlands.

The management of patients with suspected adhesive small bowel obstruction without signs of peritonitis or stranulation is controversial. A meta-analysis suggested that the ‘passage time’ of orally administered contrast agents may optimize treatment strategies.
Patients with suspected acute small bowel obstruction but not having signs of peritonitis received 100 ml of contrast medium followed by a plain abdominal radiography 12 to 24 hours later. Characteristics of two subgroups of patients were analyzed separately. The first group demonstrated the presence of contrast medium in the large bowel after these time points whereas the second group did not. The first group was considered eligible for conservative therapy whereas the second group was ideally treated by surgery.
A total of 74 patients with an ileus underwent the Gastrografin protocol. Some 66 patients were eligible for analysis. In the first group of 48 individuals, contrast reached the large bowel within 24 hours, and 45 (94%) were discharged without a surgical intervention. However, contrast failed to reach the colon in time in the second group of 18 patients. Surgery was necessary in 15 of these individuals. If contrast failed to reach the colon within 24 hours, 4 of 5 patients eventually underwent an explorative laparotomy (positive predictive value 83%). In contrast, conservative management was successful in the vast majority of patients presenting contrast in the large bowel within 24 hours after gastrografin administration (negative predictive value = 94%).

Studying the passage time of a single bolus of oral contrast medium is a simple tool contributing to the management of patients with suspected small bowel obstruction.
FP19. — HIPEC AS “ADJUVANT” TREATMENT: PROBABLY NOT A USEFUL STRATEGY TO IMPROVE SURVIVAL IN T4 COLON CARCINOMA.

Transserosal colon tumours are at high risk for the development of peritoneal carcinomatosis (PC), because of intra-abdominal shedding of cancer cells at the serosal surface. Therefore, “adjuvant” HIPEC might reduce the risk of PC and improve survival in stage II and III T4-patients. This study aims to assess the correlation between T4-tumours and the development of PC as the only site of metastatic disease, which is crucial to adequately estimate the potential benefits of HIPEC as an adjuvant treatment strategy.

Between 2004 and 2006, 384 patients underwent surgery for colon cancer. The male/female ratio was 205/179 and median age was 72 years. Tumour location was right-sided in 45.1% and left-sided in 54.9% of patients.

There were 39 stage I, 127 stage II, 89 stage III and 116 stage IV primary tumours. In 13 tumours pTNM-staging was unknown. Overall 3-year survival was 73.2%, with a median follow-up of 35.4 months. Median time to relapse was 40.5 months. Twenty-three patients (13.2%) developed PC. Incidence of PC was higher in T4 than in T3-tumours: 40% versus 9.7%, respectively (p = 0.0003). Three-year PC-free survival was 89.6% for T3-tumours and 63.3% for T4-tumours. Only in 3 out of 15 T3-tumours and 5 out of 8 T4-tumours, PC occurred as the only metastatic site.

Although T4 colon tumours are at higher risk of developing PC, only 25% (5/20) stage II and III T4-tumours developed PC as the only site of metastatic disease. A limited group of patients would benefit from HIPEC as an “adjuvant” treatment strategy.

FP20. — SURGICAL RECURRENCE AFTER ILEOCAL RESECTION FOR CROHN’S DISEASE: EXCELLENT MID-TERM RESULTS.

Majority of patients with terminal ileal Crohn’s disease require surgery during the course of their disease. Unfortunately, endoscopic and symptomatic recurrence is frequent, but surgical recurrence-free survival (RFS) is important, although a subgroup of patients need to undergo subsequent surgery. The aim of this study is to assess the relation between potential risk factors and RFS with surgical recurrence after ileocecal resection as an end point.

A retrospectively created database was used to determine RFS. Kaplan-Meier analysis was applied, together with log-rank tests and Cox regression models to assess the relation with a set of risk factors (age, BMI, history of smoking, strictureing disease, type of treatment, type of anastomosis).

Between 2001 and 2009, 277 (109 male and 168 female) patients underwent ileocecal resection for Crohn’s Disease. Mean age was 35.5 years (range: 14.0-89.6 years). The median follow up was 55.5 months (range: 14.2-120.8 months). Patients were classified according to the Montreal classification (non-stricturing and non-penetrating (24.6%), stricturing (55.6%), and penetrating (19.8%). Three-year RFS was 93.3% (95% CI: 89.5%-95.7%). For none of the considered potential risk factors, there is any evidence for a relation with RFS. However, patients requiring secondary surgery had an increased risk for further surgical recurrence (p = 0.032).

With regard to surgical recurrence, results of ileocaecal resection are excellent at medium term follow-up. Patients requiring secondary surgery demonstrate a more aggressive disease behaviour and are at increased risk for subsequent surgery.
FP21. — TEN-YEAR-OUTCOME AFTER LAPAROSCOPIC VENTRAL RECTOPEXY FOR EXTERNAL RECTAL PROLAPSE.

Few studies address long-term outcome after rectopexy procedures. This study aims to assess efficacy, functional outcome and patients’ satisfaction 10 years or more after laparoscopic ventral rectopexy for external rectal prolapse. Standardized questionnaires were sent to our first reported (1) consecutive group of patients who underwent laparoscopic ventral recto(colpo)pexy between 1995 and 1999.

Forty-two patients with a mean age of 49.7 years (range 22-88) underwent laparoscopic ventral rectopexy. Median follow-up is 13 years (range 10.3-15.6 years). Six patients died and 29 patients (69%) of the 36 remaining patients returned questionnaires (27 are female). None of the patients reported recurrent prolapse. Mean Wexner incontinence score decreased from 14.0 (range 9-20) preoperatively to 3.0 (range 0-19) after 60 months and 4.9 (range 0-20) at final follow-up. Three patients developed significant incontinence over time. Symptoms of obstructed defecation remained resolved in 76% of patients at 5-years follow-up and remained stable over time. Five patients still use laxatives daily. Mean overall satisfaction-score (scale 0-10) was 8.5 (range 0-10). None of the patients reported further pelvic surgery. From this first cohort of patients treated with laparoscopic ventral recto(colpo)pexy for total rectal prolapse, the long-term outcome data support its efficacy and beneficial functional outcome. Patients’ satisfaction remains high.

Reference

FP22. — OUR 20 YEARS’ EXPERIENCE WITH THE RESTORATIVE COLOPROCTECTOMY FOR ULCERATIVE COLITIS : WHAT DID WE LEARN ?

Up to 30% of the patients suffering from ulcerative colitis will undergo surgery. Restorative coloproctectomy is the procedure of choice. Demographic, peri-operative, and follow-up data of 250 patients were analyzed from a database to audit our 20-years experience with the ileo-anal pouch anastomosis.

From January 1990 to December 2010, 250 patients (58% male) underwent a restorative coloproctectomy. Most of them suffered from intractable disease (81%, n = 203). Other indications were toxic megacolon (5.6%, n = 14), malignancy or dysplasia (8.8%, n = 22), important bleeding (3.2%, n = 8) or benign stenosis (0.4%, n = 1). One hundred and twenty two patients (48.8%) were operated laparoscopically with a stapled anastomosis in 95% of the cases. One hundred and seventy three (69.2%) patients received a pouch during first operation. A diverting loop ileostoma was used in 75.6% (n = 189) of the patients. There was no postoperative mortality. Early septic complications were found in 21.2% of the patients, 17 patients (6.8%) developed a fistula and early obstruction was present in 6.8%. After a median follow up of 5.5 years (SD +/- 5), 14% (n = 35) developed at least one episode of small bowel obstruction. 29% of them were treated conservatively. Pouch failure was recorded in 13 patients (5.2%), of whom 10 underwent a pouchectomy.

We present a review of the surgical management of patients with ulcerative colitis over a 20-year period. A restorative coloproctectomy is a safe operation without mortality and an acceptable morbidity. Few patients developed a pouch failure, which ended in most cases with a pouchectomy.
FP23. — LAPAROSCOPIC SIGMOID RESECTION WITH TRANSRECTAL SPECIMEN EXTRACTION FOR BOWEL ENDOМETRIOSIS HAS A BETTER OUTCOME COMPARED TO CONVENTIONAL LAPAROSCOPIC SIGMOID RESECTION.


Multidisciplinary laparoscopic treatment is the standard of care for radical treatment of deep infiltrating pelvic endometriosis. The avoidance of any laparotomy could lead to a decrease in surgical stress response, a faster return to normal bowel function, a decrease in postoperative pain, less wound complications and incisional hernias. This study assesses postoperative outcome after a laparoscopic sigmoid resection with transrectal specimen extraction for bowel endometriosis.

Twenty-one patients who underwent elective laparoscopic sigmoid resection with transrectal specimen extraction for bowel endometriosis from September 2009 to September 2010 were matched to a patient who underwent a conventional laparoscopic sigmoid resection. The groups were compared for peri-operative factors, complications, length of hospital stay, postoperative pain using the Visual Analogue Scale (VAS), analgesics consumption and inflammatory response (CRP).

Median operating time was 15 minutes shorter with transrectal specimen extraction (p = 0.003). VAS-scores and use of analgesics were significantly higher in the conventional laparoscopic group (p = 0.0005). Mean CRP-level was 38% higher in the transrectal specimen extraction group, but not significant (p = 0.054). There was no significant difference between increase in CRP in both groups (p = 0.15). There were no anastomotic leaks, nor re-interventions in both groups. Median hospital stay was similar in both groups. At follow-up, no wound infections or incisional hernias were observed and none of the patients reported anal dysfunction.

Laparoscopic sigmoid resection with transrectal specimen extraction reduced operating times and decreased postoperative VAS-scores and analgesic requirements compared to conventional laparoscopic sigmoid resection for bowel endometriosis.

FP24. — ENHANCED RECOVERY AFTER SURGERY (ERAS) PROTOCOL: PROSPECTIVE STUDY OF OUTCOME IN COLORECTAL SURGERY.


Fast-track programs (ERAS) have been shown to improve postoperative recovery in colorectal surgery, combining newer anaesthetic and minimally invasive surgery with evidence-based adjustments to facilitate revalidation. This prospective study evaluated the outcome of an ERAS protocol implementation in a University colorectal unit.

Between 2009 and 2010, 94 patients (49 males and 45 females) underwent an elective colorectal resection and were included in this protocol. All data were prospectively gathered in an electronic database. A cohort comparison was performed with patients operated on in 2008 before ERAS implementation.

The mean age was 58 years [range: 29-76 years] and the mean ASA score was 2. All colorectal procedures (85 anterior resections, 6 right hemicolectomies, 2 rectal resections and 1 segmentectomy) were performed laparoscopically, with a conversion rate of 9.5%. Complications were noted in 14 patients (14.89%), two patients (2.12%) required a laparoscopic drainage of an infected hematoma during initial hospital stay. A significant reduced mean postoperative hospital stay of 4 days [range: 2-11 days] in the ERAS group, compared with 7 days [range: 4-20] in the non fast-track group was noted. Early readmission occurred in five patients (5.3%): anastomotic leakage (n = 2), ileus (n = 2) and a wound infection (n = 1).

These results of length of stay, morbidity and readmission rates have important implications for the organization of health care, waiting lists and costs. Therefore the ERAS principles should be more wide-spread implemented.
FP25. — LONG-TERM IMPACT OF ANORECTAL DYSFUNCTION AFTER RECTAL CANCER SURGERY.

The background is mesorectal excision with or without neoadjuvant chemoradiotherapy for rectal cancer affects anorectal function; the aim being the evaluation of anorectal dysfunction and symptom-related discomfort, embarrassment and fear at 12 months or more after treatment.

Eighty-seven patients underwent sphincter-saving surgery for primary rectal cancer between 2005 and 2008. Patients were excluded if bowel continuity was not restored or if adjuvant chemotherapy was not ended 12 months before survey completion. Patients and subjects from an age- and gender-matched control group received Vaizey and COREFO questionnaires. Comparisons were made using Chi square test.

Seventy-nine patients with rectal cancer and 79 control subjects completed the questionnaires. Patients had worse anorectal function than controls. Mean number of bowel movements during the day in patients and controls was 2.8 +/- 1.6 versus 1.3 +/- 0.8 (p < .0001). Night time defecation was reported by 48% patients with a mean frequency of 1.2 +/- 0.7. About 60% of patients reported urgency, 67% incontinence for flatus or liquid stools, 34% incontinence for solid stools, 28% evacuation difficulties. Significantly more protective pad use, anti-diarrheal medication and sexual limitations were observed in patients. Low anterior resection syndrome (> 2 defections/day, urgency and clustered defecation) was observed in 33% of the patients. Anorectal dysfunction limited social activities and lifestyle in 27% of patients. Involuntary loss of flatus or stool was the most important causes of fear and embarrassment.

Individually adapted care seems to be warranted in order to improve confidence and well-being in a relevant number of patients.

FP26. — ULTRA LOW ANTERIOR RESECTION FOLLOWING CHEMORADIATION: THE END OF THE 1 CM RULE?
U.Z. Gent, Gent, Belgium.

Controversy persists concerning the oncological safety of very close distal margins in patients with low (≤ 5 cm) rectal cancer treated with neoadjuvant chemoradiation (nCRT).

All patients with low rectal cancer treated with nCRT (45 Gy) followed by sphincter saving surgery were identified from a prospective database. We analysed pathological and surgical outcome including local recurrence rate. Also, we studied the influence of distal margin (> 1 cm versus ≤ 1 cm) on overall survival using log rank analysis. Data are expressed as mean ± SD or median (range).

From 1998 until 2010, 109 patients (73% male) were identified. Clinically, 59% were staged as node positive. The pre-CRT distance from the anal verge was 3 cm (0.3-6). All patients underwent ultra low anterior resection; 35% underwent intersphincteric resection and colo-anal anastomosis. A protective ileostomy was constructed in 90% of patients. Stage distribution was as follows: stage 0 (ypCR): 16%, stage I, 30%, stage II, 21% and stage III, 19%. The median distal margin was 10 mm (0.1-40 mm). After a median follow up of 33 months, isolated local recurrence developed in 2 patients (1.8%) one of whom underwent successful surgical salvage. Two patients (1.8%) developed local and distant recurrence, while metastatic disease only developed in 25 patients (23%). Overall 5 year survival was 70%, and did not differ between a distal margin > 1 cm versus ≤ 1 cm (P = 0.18, log rank).

In patients with low rectal cancer undergoing nCRT, a distal margin < 1 cm does not compromise local control or survival.
**FP27.** — OPTIMAL TIMING FOR TME-SURGERY TO ASSESS COMPLETE RESPONSE AFTER NEOADJUVANT CHEMORADIOThERAPY IN MID AND DISTAL RECTAL CANCER.

Usually, the interval between neoadjuvant chemoradiotherapy and total mesorectal excision (TME) for locally advanced rectal cancer is 6-8 weeks. However, tumor regression is variable. This study aims to evaluate the optimal time-window with regard to complete pathological response (pCR), surgical and oncological outcome.

Three hundred and fifty-six consecutive patients with locally advanced rectal cancer were identified. Mean age was 62 years and 65% were males. Patients received neoadjuvant chemoradiotherapy with a continuous infusion of 5-fluorouracil. Data type of surgery, pathology, complications, length of hospital stay, disease recurrence and mortality were reviewed. Patients were divided into 2 groups according to the interval between neoadjuvant therapy and surgery: ≤7 weeks (group A, n = 201), >7 weeks (group B, n = 155).

The pCR-rate (ypT0N0) was 21%. It was significantly higher with a longer interval: 28% versus 16%, respectively (p = 0.006). There were more responding tumors (ypT0, ypT1) in the longer interval-group, 24% in group A versus 35% in group B (p = 0.034). A longer interval did not influence morbidity and length of hospital stay. After a median follow-up of 4.9 years the 5-year overall survival-rate was 84% and the disease-free survival rate was 76%. A better disease-free-survival was observed in patients treated after an interval > 7 weeks.

After neoadjuvant chemoradiotherapy, the timepoint for TME-surgery, optimizing response and oncological outcome is 7 weeks. A longer interval increases pCR-rate, with better disease free-survival, without affecting morbidity. This study corroborates results from other smaller series and sets the standard for optimal timing of TME-surgery.

**FP28.** — TECHNICAL FEATURES AND RESULTS OF 63 PRIMARY SILS GASTRIC BYPASSES.

We introduced the SILS (Single Incision Laparoscopic Surgery) approach for Gastric bypass in November 2009. Technical improvements (trocar, clamps, scopes) and new standardized steps of the procedure have provide a very fast learning curve and the operative duration is now equal to the laparoscopic one. The SILS approach currently represents 91% of all primary GBP. From November 2009 to February 2011, 63 patients (55 women - 87%) underwent the procedure (single surgeon experience). Preoperative data were: mean age 40.2 years (20-64), mean height 162 cm (143-186), mean BMI 44 (36,1-60,7).

No conversion to laparoscopy or laparotomy occurred. Mean hospital stay was 4.3 days (3-6). No complication was observed (local or general), including a normal healing of the umbilical wounds. In comparison with the laparoscopic approach, moreover the obvious psychological benefit of SILS, we observed a significant improvement of some postoperative data (pain rating, inflammatory biological tests). Weight loss after 6 & 9 months is equivalent to the laparoscopic series.

In conclusion, SILS GBP is an advanced reproducible surgical procedure. Feasibility is slightly limited by the current provided tools. Results are at least equal to those of standard laparoscopy.
FP29. — LAPAROSCOPIC SLEEVE GASTRECTOMY AS A SINGLE-STAGE PROCEDURE FOR THE TREATMENT OF MORBID OBESITY: QUALITY OF LIFE, RESOLUTION OF CO-MORBIDITIES, FOOD TOLERANCE AND 6-YEAR RESULTS FOR WEIGHT LOSS.

This retrospective study evaluates long term weight loss, resolution of co-morbidities, quality of life (QoL) and food tolerance following laparoscopic sleeve gastrectomy (LSG).
Between January 2003 and July 2008, 102 patients underwent LSG. A retrospective review of a prospectively collected database was performed. Demographics, complications, percent excess weight loss (%EWL) and effect on co-morbidities were determined. QoL was measured with SF-36 and BAROS questionnaires. The food tolerance score (FTS) was compared to non-obese subjects.
Eighty-three patients (81.4%) were eligible for follow-up. Mean initial BMI was 39.3. No major complications occurred.
At median follow-up of 49 months (range 17-80) mean % EWL was 72.3% (+/-29.3). Twenty-three patients reached 6 years follow-up, mean % EWL was 55.9 (+ 25.6). After one year 100% (7/7) of patients with sleep apnea withdrew from CPAP-mask. Antidiabetic medication was reduced or discontinued in 50.0% (5/10) of diabetic patients. The resolution rate of dyslipidemia 12 months after surgery was 69.4%. Hypertension normalized in 81.8%. A good to excellent BAROS-score was found in 90.4%. When comparing patients with >50% EWL with patients < 50% EWL, SF-36 scores were statistically different only for ‘physical functioning’ and ‘general health perception’. Mean FTS was 23.8 and 95.2% of patients described food tolerance as acceptable to excellent.
LSG is a safe and effective bariatric procedure although a tendency of weight regain is noticed after 5 years. LSG results in excellent reduction of co-morbidity comparable to that of other bariatric procedures and in good to excellent health-related QoL. In 95.2% of patients food tolerance is acceptable to excellent.

FP30. — SMALL BOWEL OBSTRUCTION AFTER ANTECOLIC ANTEGASTRIC LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS: A SINGLE CENTER 7-YEARS’ REVIEW.

Reported incidence of small bowel obstruction (SBO) after laparoscopic Roux-en-Y gastric bypass varies between 1.5-3.5%. It has been suggested that the antecolic antegastric laparoscopic Roux-en-Y gastric bypass (AA-LRYGB) is associated with a low incidence of internal hernia (IH). Therefore we routinely did not close mesenteric defects. The records of 652 consecutive patients undergoing AA-LRYGB from January 2003 to August 2009 in a single institution were retrospectively reviewed to determine the incidence, etiology, radiologic diagnostic accuracy and operative outcomes of small bowel obstruction.
Of the 652 patients, 63 (9.6%) developed SBO. The majority (6.9%, 45 patients) had a SBO due to internal hernia (IH). In 41 (91%) cases, the IH was at the jejunoojejunostomy, 4 cases had an IH at Petersen’s space. Twenty-nine out of 63 cases had negative CT-findings and IH was diagnosed on CT in only 33% (14/45) of patients with IH. All patients underwent diagnostic laparoscopy. Conversion rate was 29% (13 cases). No bowel resections had to be performed.
In contrast to previous reports, a high incidence of SBO with a high rate of IH at the jejunoojejunostomy site was found in our series. Accuracy of CT is low and diagnostic laparoscopy is mandatory when SBO is suspected. Since 2010 we started closing the jejunoojejunostomy site and data on SBO are collected prospectively. We believe that closing of the mesenteric defects is a mandatory step, even in an AA-LRYGB.
FP31. — THE IMPACT OF SURGICAL VOLUME AND EXPERIENCE ON OUTCOME IN SECONDARY GASTRIC BYPASS AFTER FAILED ADJUSTABLE GASTRIC BANDING.

M. De Visschere, E. Van Dessel, D. Van Der Fraenen, S. Van Cauwenberge, B. Dillemans.
A.Z. St Jan, Brugge, Belgium.

The preferred procedure for failed laparoscopic adjustable gastric banding (LAGB) is the Roux-en-Y gastric bypass (RYGB). However, the safety of this secondary gastric bypass (SGB) has only been reported in small study groups. The aim of this study is to determine the early morbidity and mortality of this conversion procedure in a large group of patients operated on by a single surgeon.

Between May 2004 to July 2010, 324 patients underwent a secondary RYGB. This study analyses the 30 day morbidity and mortality.

Of the 324 patients, 61 patients had had a removal of the gastric band before their first consultation at our hospital. The other 263 patients had a conversion procedure with removal of the band. Of this latter group, a one-step procedure was performed in 59.3% patients, a two-step procedure in 40.7%. The mean BMI was 38.9 kg/m². Eighteen (6.8%) patients had early complications (< 30 days). Hemorrhage (3.1%) was the most common complication. We had neither anastomotic nor staple line leakage. No patient died during the 30 day follow-up period.

Conversion of LAGB to RYGB is feasible and safe and has a comparable complication rate as the primary RYGB. Three major factors have contributed to these good results. Firstly the complete standardization and full stapling of the procedure. Secondly, careful attention to certain surgical technical details. And thirdly, by increasing our learning curve, the initial restrained approach for a one-step procedure could be gradually left.

FP32. — PROPHYLACTIC CHOLECYSTECTOMY, A MANDATORY STEP IN MORBIDLY OBESE PATIENTS UNDERGOING LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS?

A.Z. Groeninge, Kortrijk, Belgium.

The aim of this study was to determine the incidence of symptomatic gallstone disease requiring cholecystectomy (CCE) after laparoscopic Roux-en-Y gastric bypass (LRYGBP) and to identify the peri-operative risk-factors associated with postoperative symptomatic gallstone disease.

Between August 2003 and November 2009, 724 patients underwent LRYGBP at the Groeninge Hospital. Preoperative ultrasound was performed in 600 of 641 patients without history of CCE and 120 (20.0%) were diagnosed with cholecystolithiasis. Six hundred and twenty-five patients were included and 43 (6.9%) developed delayed symptoms related to biliary disease. Of these 43 patients, 39 underwent post-LRYGBP CCE. Of these 39 patients, 9 (7.5%) had a positive ultrasound prior to LRYGBP. Multivariable analysis identified a weight loss at 3 months post-LRYGBP of more than 50% of excess weight (HR(95% CI) : 2.04(1.04-4.28) ; p = 0.037) as the sole significant independent predictor of delayed symptomatic cholecystolithiasis.

Symptomatic gallstone disease occurred only in 6.90% of the patients post-LRYGBP. Multivariate analysis identified a weight loss at 3 months post-LRYGBP of more than 50% of excess weight as the sole significant independent predictor of delayed symptomatic cholecystolithiasis. Prophylactic CCE should not be recommended at the time of LRYGBP.
FP33. — VERTICAL SLEEVE GASTRECTOMY AND OMENTECTOMY AS A DURABLE SOLUTION FOR TYPE 2 DIABETES MELLITUS.
E. Post, M. Van Dorp, S. Helsens, G. Hubens, W. Vaneerdeweg.
U.Z.A., Antwerpen, Belgium.

Bariatric surgery is known to cure obesity as well as its most important co-morbidity, type 2 diabetes mellitus, in an effective and durable way. To this end, a wide range of procedures is available to the contemporary bariatric surgeon. The aim of this study was to evaluate the effects on weight reduction, glucose tolerance and metabolic profile of a combined Vertical Sleeve Gastrectomy (VSG) and omentectomy. As a study object we opted for a pre-diabetic rat model, the Zucker Diabetic Fatty (ZDF) rat.

A total of 29 male ZDF rats were assigned to four different groups: omentectomy, VSG, VSG combined with omentectomy (VSG/OM) and sham surgery. Body weight and food consumption were monitored on a regular basis. In order to clarify possible pathophysiological mechanisms we measured plasma TNF-α, leptin, adiponectin, GLP-1, PYY and ghrelin levels. Additionally, lipid profiles on all specimens were determined.

Overall we found a remarkable short- and long-term effect of VSG/OM on weight reduction. As a sole procedure, omentectomy also proved to be significantly effective. Improved glucose tolerance was seen especially in the omentectomy group (OGTT AUC -20.7%), as well as in the VSG/OM group (OGTT AUC -14.8%).

Omentectomy, both on a stand-alone basis and combined with VSG, has shown promising results regarding weight loss and glucose tolerance. The findings with respect to the underlying pathophysiology are currently under investigation by our research group. With these results we will hopefully be able to explain the mechanisms behind the effects found.

FP34. — LIFE-THREATENING SIDE EFFECTS OF MALABSORPTIVE PROCEDURES IN OBESE PATIENTS NECESSITATING CONVERSION SURGERY: A REVIEW OF 14 CASES.
U.Z. Gent, Gent, Belgium.

The aim of bariatric surgery is the reduction of long term overweight-related side effects. Malabsorptive procedures can cause serious side effects. We investigated whether conversion surgery is an effective treatment for these side effects. We identified 14 patients from our hospital database who underwent conversion surgery after Scopinaro BPD (10), duodenal switch (2), or distal gastric bypass (2).

Most patients complained of diarrhea (7/9), asthenia (6/13), abdominal discomfort (8/14), oedema (6/12) and extreme weight loss (7/14). A smaller portion suffered from liver disease, dumping, osteoporosis, fractures, night blindness, or needed parental nutrition. Blood tests revealed anemia, nutritional deficits, secondary hyperparathyroidism, liver dysfunction, and signs of sarcopenia. After a mean period of 75 months (10-156) the malabsorptive procedure was either converted to an elongation of the common limb (3) or to a gastric bypass (11). After a mean follow-up of 2-year we found improvement of anemia and nutritional parameters. The median blood calcium and PTH levels normalized. Three patients still needed parental nutrition. Half of the patients were re-operated after conversion surgery because of abdominal complications. The mean number of operations per person since the malabsorptive surgery was 4. One patient died of irreversible liver failure after three liver transplantations. One patient died of longstanding non-correctable metabolic disturbances.

Malabsorptive surgery can cause invalidating and life-threatening side effects. If there are signs of incipient deterioration in organ function, nutritional status, or development of cachexia, conversion surgery should not be delayed. Although early surgery can reverse these side effects, many patients experience postoperative complications.
FP35. — PREOPERATIVE VERY LOW CALORIE DIET (VLCD) AND OPERATIVE OUTCOME AFTER LAPAROSCOPIC GASTRIC BYPASS. A RANDOMIZED MULTICENTRE STUDY.
1U.Z. Gent, Gent, Belgium; 2Kaunas University, Lithuania; 3Hospital General Universitario J. M. Morales Meseguer, Murcia, Spain; 4Maxima medisch centrum, Eindhoven, The Netherlands; 5UCM Utrecht / Sint Antonius Hospital Nieuwegein, The Netherlands; 6Danderyd Hospital, Karolinska Institutet and Ersta Hospital, Stockholm, Sweden.

A 14-days very low-calorie diet regimen prior to laparoscopic gastric bypass will improve per- and postoperative outcome in morbidly obese patients.

Design: A metacentre randomized single-blinded study. Setting: Five high-volume bariatric centres in Sweden, the Netherlands, Lithuania, Spain and Belgium. Patients: 298 morbidly obese patients undergoing laparoscopic gastric bypass from March 2009 through December 2010. Intervention: Patients were randomly allocated to a two-week very low-calorie dietary regimen only (VLCD) or no dietary restriction (Control) preoperatively. Main outcome measures: Operating time, surgeon’s perceived difficulty peroperative (VAS), liver lacerations, intra-operative bleeding and complications, 30-days weight loss and morbidity.

Preoperative weight change was -5 (-7 to -2.7) kg in VLCD vs 0.0 (-1.5 to 1.0) kg in Control (p < 0.0001). Although surgeon’s perceived difficulty peroperative was lower in VLCD (26 (15 to 42) vs 35 (18 to 50) mm, p < 0.05) no differences were found regarding operating time, (75 (64 to 90) vs 75 (65 to 95) min), estimated blood loss, or intra-operative complications (p = ns for all). At 30 days postoperatively, total weight loss was similar in VLCD and Control (13.8 (10.7 to 17.1) vs 9.0 (6.6 to 11.6) kg, p = ns). However, postoperative complications were more common in Control compared to VLCD (18 vs 8, p = 0.037).

Although weight reduction with a 14 days VLCD regimen prior to laparoscopic gastric bypass performed in high volume centres seems to reduce perceived difficulty of the procedure, only minor effects on operating time, intra-operative complications, and short-term weight loss could be expected. However, the finding of reduced postoperative complication rates suggests that such a regimen should be recommended prior to bariatric surgery.

FP36. — CLEARANCE CAPACITY OF THE FUTURE REMNANT LIVER CAN PREDICT LIVER FAILURE AFTER HEPATECTOMY.
U.Z.A., Antwerpen, Belgium.

Correct assessment of the remnant liver function after hepatectomy is still difficult. It is necessary to develop accurate diagnostic tools to predict liver resection–related morbidity. Here, we evaluated clearance capacity of the future remnant liver (FRL) in patients undergoing liver resection. Postoperative morbidity and liver failure were evaluated in these patients.

Between 2008 and 2010, 61 patients were included, undergoing hepatectomy. Liver failure was defined as PT < 50; bilirubin > 50 µmol/l, ammonium > 50 µmol/l and therapy-resistant ascites, from day 5 until 3 months after hepatectomy. Liver clearance capacity was measured by hepatobiliary scintigraphy using 99m-Tc-mebrofenin and was recalculated for future remnant liver volume (FRLV-mebro), expressed as %/min/BSA. Total liver volume (TLV) and future remnant liver volume (FRLV) were measured on MRI.

Liver failure occurred in 8 patients. They had significant lower FRLV-mebro clearance than patients without liver failure (2.39 ± 0.78 vs 4.45 ± 1.63 respectively, p < 0.001). Patients with severe complications had significant lower FRLV-mebro clearance than patients without severe complications (2.67 ± 0.90 vs 4.67 ± 1.65 respectively; p < 0.01). ROC analysis showed that clearance below 2.3%/min/BSA of FRLV is a risk factor for liver failure after hepatectomy, with PPV of 88% and NPV of 96%; Likelihood ratio for a positive test result was 40 with OR of 175 for development of liver failure.

Preoperative measurement of mebrofenin-clearance, recalculated for future remnant liver volume is a valuable tool to predict liver-resection related morbidity.
FP37. — DUODENAL CONTAMINATION OF GASTRIC CONTENTS IN GASTROESOPHAGEAL REFUX DISEASE (GERD) PATIENTS.
J.-M. Collard¹, P. Bechi², R. Romagnoli³, F. Baldini³.
¹Cliniques Universitaires St. Luc, Louvain-en-Woluwe, Belgium; ²University of Florence, ³University of Turin, Italy.

To assess duodenal contamination of gastric contents in non-Barrett’s and Barrett’s GERD patients.
Gastric exposure to bile was measured by 24-hour intragastric bile monitoring with the Bilitec 2000® device in 25 healthy subjects (group 1), 30 GERD patients with erosive esophagitis (group 2), and 30 GERD patients with Barrett’s (group 3). Group 3 patients were further subclassified according to the absence (subgroup 3a, n = 24) or the presence (subgroup 3b, n = 6) of dysplasia. Results were expressed as the percentage of time that bile absorbance was above the 0.25 absorbance threshold during the total, upright, and supine periods of recording. All patients were advised to take food not producing absorbance peaks above this threshold.

Gastric exposure to bile was significantly higher (p = 0.01) in group 3 than in group 1 during the 3 periods of recording, and than in group 2 during the total and supine periods (p = 0.03). The prevalence of pathologic Bilitec 2000® test increased significantly (p = 0.04) from 20% in group 2 to 42% in subgroup 3a, and to 67% in subgroup 3b.

Duodenal contamination of gastric contents refluxing into the esophagus increases parallel to the severity of GERD, playing a critical role in the genesis of both metaplastic and dysplastic changes within the esophageal mucosa.

FP38. — PANCREATIC SURGERY: A 10-YEAR EVALUATION IN A TERTIARY REFERRAL CENTRE.
U.Z. Gent, Gent, Belgium.

Advances in imaging, minimally invasive techniques, and regionalization have changed pancreatic surgery. Therefore, the aims of this report are to determine what the expectations for referring doctors and their patients might be regarding the outcome of pancreatic operations for carcinoma in a high-volume centre. Our aim was to evaluate the morbidity, mortality and quality of life for patients with pancreatic resections for malignancy.

From April 2000 through to September 2010, 377 pancreatic resections for malignant disease were performed at the University of Ghent Hospital. Besides patient characteristics, the type of surgical procedures, pathology reports regarding TNM and R status of resection, surgical and overall morbidity, the use of adjuvant therapy and short-term outcome and quality of life were evaluated.

In the 5-year period 2005-2010, more operations were performed (n = 133 vs n = 240), while the mean age did not change (66 years ± 11 y). Most operations performed consisted of a pancreaticoduodenectomy in both time era’s and the number of pylorus-preserving procedure did not change (56% vs. 58%). However, during recent years more venous reconstructions (17% vs 11%) and less surgical re-interventions were performed. Superior mesenteric artery involvement is up to today still considered a contra-indication for surgical resection. The treatment of complications by intervention-al radiology increased over the years. In-hospital mortality improved to less than 0.8% in 2009.

At a high-volume pancreatic surgery centre, the number of treated patients, the characteristics of the tumour, the percentage of resectability, even with vascular involvement, all have increased, whereas the outcome continued to improve.
FP39. — ANTRALLY-INERVATED WHOLE STOMACH AS ESOPHAGEAL REPLACEMENT.

Cliniques Universitaires St. Luc, Louvain-en-Woluwe, Belgium.

Most side effects of an esophagectomy relate to the concomittant section of the vagus nerves. A totally original technique of gastric tailoring was devised in our Unit to re-establish digestive continuity after vagus sparing esophagectomy for early neoplastic changes. This technique consists in constructing a gastric transplant with the whole stomach while preserving the vagal supply to both the antrum and pylorus. It was used in 5 patients operated on for either high-grade dysplasia (HGD) or T1a carcinoma of the esophagus. After the stripping of the esophageal tube according to Akiyama’s technique, the gastric transplant was elevated up to the neck through the substernal (n = 4) or posterior mediastinal (n = 1) space. The cervical anastomosis was made using another totally original technique also devised in our Unit, i.e. the end-to-side semimechanical anastomosis technique.

At follow-up, all five patients could take a strictly normal diet in 3 to 4 meals per day without dysphagia, so that their alimentary comfort eventually was similar to the one they had before the operation. Intragastric manometry identified spontaneous antral contractions as high as 280 mmHg that were also visible on barium swallow study. Gastric exposure to bile at 24-hour intragastric bile monitoring was within the normal range.

This novel technique of gastric tailoring provides patients with an excellent alimentary comfort at follow-up. It is best indicated in HGD arising in long Barrett’s.

FP40. — DUODENAL SWITCH OPERATION FOR PATHOLOGIC TRANSPYLORIC DUODENO GASTRIC REFLUX.

Cliniques Universitaires St. Luc, Louvain-en-Woluwe, Belgium.

To assess the long-term results of the duodenal switch operation made for pathological transpyloric duodenogastric reflux (DGR).

A duodenal switch operation was made on 48 patients suffering from pathological transpyloric DGR either unrelated (n = 28) or secondary (n = 20) to previous upper gastro-intestinal (G-I) surgery including cholecystectomy or vagotomy. They had: a long history of gastric symptoms (i.e. nausea, epigastric pain, and/or bilious vomiting) poorly responsive to medical treatment (48/48), gastroesophageal reflux symptoms unresponsive to proton-pump inhibitors (PPI) (23/29), gastritis on upper G-I endoscopy (37/48) and/or at histology (28/41), presence of a bilious gastric lake at > 1 upper G-I endoscopy (30/48), pathological 24-hour intragastric Bilitec® test (40/41), and absence of Helicobacter pylori antral infection (39/41).

At follow-up (median: 81 months), gastric symptoms were nil, had improved, and remained unchanged in 29 (60.4%), 16 (33.3%), and 2 (4.2%) patients, respectively, and 1 patient experienced symptomatic recurrence after a 92-month symptom-free period (2.1%). Postoperative examinations showed: no endoscopic gastritis (42/44), a normalized 24-hour intragastric Bilitec® test (34/36). Five patients (11.3%) developed an ulcer at the duodenojejunostomy.

The duodenal switch operation made on patients in whom diagnosis of pathological transpyloric DGR is supported by several objective arguments provides most of them with symptomatic and endoscopic improvement parallel to abolishment or normalization of gastric exposure to bile. Postoperative PPI therapy during a 2-month period is to be recommended to prevent the development of an anastomotic ulcer.
FP41. — INTRATHORACIC PERI-ESOPHAGEAL FUNDOPPLICATION FOR SHORT ESOPHAGUS.


Intrathoracic fundoplication is indicated in gastro-oesophageal reflux disease (GERD) with short oesophagus. The clinical charts of 84 patients who underwent an intrathoracic fundoplication for GERD with short oesophagus were reviewed. At operation, particular attention had been paid to the following steps: further enlargement of the hiatal sling, careful manipulation of gastric tissues with the fingers rather than with forceps, and meticulous anchoring of the wrap to the hiatus with numerous sutures while mimicking diaphragmatic movements that arise on cough. Results were assessed by personal interview (n = 84) (median follow-up: 51.5 mo.), barium swallow study (n = 84), 24-hour oesophageal pH-monitoring (n = 65), and oesophageal stationary manometry (n = 56).

No patient had any symptoms of reflux, 5 (5.9%) had episodes of dysphagia, and 31 (37%) had some degree of flatulence that interfered with social life in 5 of them only. Oesophageal acid exposure at oesophageal pH-monitoring normalized in all patients studied. Lower oesophageal sphincter resting pressure increased significantly (p < 0.0001) from 6.9 mm Hg to 20.6 mm Hg. Two patients were re-operated on for gastric perforation that was due to misplacement of a 8th stitch in the gastric wall in one and to the intake of an anti-inflammatory pill in the other.

Intrathoracic peri-oesophageal fundoplication for short oesophagus is amazingly effective on reflux. Strict observance of some critical technical details makes spontaneous gastric perforation very unlikely. The use of anti-inflammatory drugs is to be forbidden at follow-up.

FP42. — MINI-LAPAROSCOPIC VERSUS CONVENTIONAL LAPAROSCOPIC CHOLECYSTECTOMY: A PROSPECTIVE STUDY – PRELIMINARY RESULTS.

L. F. Abreu de Carvalho, M. Kint. A.Z. St-Lucas, Gent, Belgium.

The goal of this study is to compare mini-laparoscopic cholecystectomy (MLC: one 10 mm port; one 5 mm port; two 2.5 mm ports) with conventional laparoscopic cholecystectomy (LC: two 10 mm ports; two 5 mm ports).

This study is a single-blind, single-centre trial. Only patients with symptomatic cholecystolithiasis requiring an elective cholecystectomy are included. The main outcome measure is postoperative pain.

Of the 40 patients included in the study thus far, 11 underwent MLC and 29 underwent LC. The two groups were equal concerning age, sex and BMI. The median operating time and duration of hospital stay were similar in both groups. The level of postoperative pain was analogous in the two procedures at 1, 3, 6 and 12 h; there was a tendency in the MLC group for the patients to have less incisional pain, though more general abdominal pain. At 24 h, there was stronger evidence for less incisional as well as general abdominal pain at rest in the MLC group (median numerical rating score: 0 (0-1.5) versus 3 (1-4.75), P = 0.020 and 0 (0-1) versus 1 (0-3.75), P = 0.036, respectively). There was no difference in the analgesic requirements and the patient’s evaluation of the cosmetic result between the two groups.

In elective patients, MLC took a similar time to perform and tended to be associated with less postoperative pain than the conventional laparoscopic procedure at 24h. MLC did not lead to a greater satisfaction of the patients with the cosmetic result.
FP43. — EVALUATION OF THE 7th UICC TNM CLASSIFICATION FOR ESOPHAGEAL CANCER USING A SINGLE CENTRE DATABASE.

The aim of this study is to evaluate performance of the 6th and 7th-editions of the UICC-TNM staging system in oesophageal cancer and to compare these results with the recently published nomogram by Lagarde for Adenocarcinoma (AC).

One thousand and ninety five patients receiving primary surgical R0-resection between 1990 and 2009 were included. Patients were staged using the 6th and 7th-UICC edition and according the nomogram. Patients with gastro-oesophageal tumour location were restaged as oesophageal tumours for the 6th-UICC edition. Homogeneity, discriminatory ability and monotonicity of gradients were compared using linear trend chi2, likelihood-ratio chi2 statistics and Akaike information criterion (AIC) calculation.

Seven hundred sixty-eight (70%) patients presented with AC, 327 (30%) with Squamous Cell Carcinoma (SCC). Overall five-year cancer-specific survival for the entire cohort (exclusive mortality) was 58.6% (57.8% for AC and 60.0% for SCC). Major strengths of the 7th-edition are a significantly better differentiation for early stages and stratification of survival according to the number of positive lymph nodes. The UICC 7th-edition shows better homogeneity, discriminatory ability and monotonicity compared to the 6th-edition. However the nomogram for AC shows a still better homogeneity and monotonicity over the 7th-edition, indicating that other factors (e.g. extracapsular lymph node involvement) have an additional prognostic influence.

The 7th-edition of the UICC-TNM staging system performs better than the 6th-edition, with better differentiation of early disease and better stratification of survival according to number of positive lymph nodes. This may have implications on the choice of treatment, indicating that accurate pre-treatment staging is of the utmost importance.

<table>
<thead>
<tr>
<th></th>
<th>Homogeneity Cox LR Chi² (*)</th>
<th>Disciminatory ability Linear trend Chi² (*)</th>
<th>Monotonicity AICc (**)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AC</td>
<td>SCC</td>
<td>AC</td>
</tr>
<tr>
<td>TNM 6th</td>
<td>78.85</td>
<td>44.61</td>
<td>314.79</td>
</tr>
<tr>
<td></td>
<td>99.32</td>
<td>57.31</td>
<td>343.79</td>
</tr>
<tr>
<td>Nomogram</td>
<td>107.94</td>
<td>305.69</td>
<td>3370.2</td>
</tr>
</tbody>
</table>

(*) Higher score = better
(**) Lower score = better

FP44. — HERNIATION OF AN ABDOMINAL ANTIREFLUX FUNDOPICATION INTO THE CHEST: WHAT DOES IT MEAN?
Cliniques Universitaires St. Luc, Louvain-en-Woluwe, Belgium.

The specific contribution of the herniation of an abdominal antireflux fundoplication into the chest to the failure process of the operation remains unclear.

The study is based 189 patients either re-operated on for herniation of an abdominal 360° (group 1; n = 95) or partial (group 2; n = 10) fundoplication into the chest or having had an intrathoracic 360° fundoplication for short esophagus (group 3; n = 84). There were 4 subgroups in group 1: 1A: wrap still complete and peri-oesophageal; 1B: wrap still complete but perigastric; 1C: wrap still peri-oesophageal but partially disrupted; 1D: wrap perigastric and partially disrupted.

The prevalence of defective symptoms (heartburn, regurgitation) was significantly lower (p < 0.0001) in group 3 (0%) and subgroup 1A (3.7%) than in subgroups 1B (84.4), 1C (86.7%) and 1D (100%), and in group 2 (100%). The prevalence of obstructive symptoms (dysphagia, chest pain, necrosis, perforation) was significantly higher (p < 0.0001) in subgroup 1A (100%) than in subgroups 1B (57.8%), 1C (60%), and 1D (25%). The prevalence of short oesophagus abdominal wall hernia repair, and high abdominal pressure episodes in reoperated patients was 13.7%, 36.2%, and 67.2%, respectively.

Unlike a perigastric or a partial fundoplication, a 360° peri-oesophageal abdominal fundoplication is still effective on reflux once herniated into the chest. Obstructive symptoms are due to either diaphragmatic strangulation or perigastric migration of the wrap (slipknot effect). Short oesophagus, weakness of the abdominal wall, and high abdominal pressure episodes favour the herniation process.
FP45. — PREVENTING AN OPEN WINDOW THORACOSTOMY IN POSTPNEUMONECTOMY EMPYEMA.

Postpneumonectomy empyema remains a serious and often lethal complication. In up to 80% of patients, post-
pneumonectomy empyema is associated with bronchial stump insufficiency. Treatment remains a challenge. Surgical
options vary from pleural irrigation to open window thoracostomy.

Four patients with a postpneumonectomy empyema are presented. The method of treatment consists in covering the
bronchial stump with a pedicled intercostal muscle flap, extensive debridement and packing with wet dressings of
rifamycine. Systemic antibiotic therapy is given according to the microbiological findings. The purpose is to repeat the
intervention with an interval of one or two days until the pleural space is macroscopically clean. Finally, the thoracic
cavity can be closed obliterating the cavity with antibiotic solution.

The empyema was treated successfully in all patients. Three patients were successfully treated as planned, preventing a
window thoracostomy. One patient eventually needed an open window thoracostomy due to persistent invasive
aspergillosis.

Covering the bronchial stump using a pedicled intercostal muscle flap combined with serial surgical debridement and
finally obliterating the cavity with antibiotic solution is an efficient method to treat postpneumonectomy empyema and
offers an elegant alternative to open window thoracostomy.

FP46. — HOW TO MANAGE OCCLUDED INFRATERMINAL BYPASS GRAFTS?
C.H.U. Sart Tilman, Liège, Belgium.

The authors analyze their experience with thrombolytic management of occluded infrainguinal bypass grafts.
It concerns 84 consecutive patients who benefited 108 intra-arterial thrombolytic procedures. Sixty three patients had a
single thrombolytic procedure, 17 patients had two and 4 patients had three thrombolytic procedures. It concerned a
venous bypass graft (39%), a Dacron prosthesis (44%), a PTFE prosthesis (10%) or a cryopreserved allograft (7%).
Complete thrombolysis was achieved in 83 patients (76%) and the immediate limb-salvage rate was 92% (100/108). In
half of the procedures (54/108), open surgery could be avoided. Catheter-guided fibrinolysis was characterised by a 33%
complication rate (36/108), including two cerebral haemorrhages, of which one was fatal. At 45 months, the clinical out-
come was excellent for 33 patients while 27 presented residual limb ischemia grade 2B or 3 and 24 patients lost their
limb (24 major amputations). The limb salvage rate was 72%. Failure to recanalise the occluded graft by fibrinolysis
(observed in 25 procedures), was significantly correlated to thrombosed vein grafts (failure rate of 33%, p = 0.05) and
the old (lasting since 2 weeks or more) graft occlusions (failure rate = 53%, p = 0.03).

Despite the high re-thrombosis rate, thrombolysis procedure leads to a high limb salvage rate. We consider thrombolysis
of occluded infra-inguinal bypass grafts for patients suffering critical limb ischemia, for which no other revasculari-
sation options are available. Thrombolysis has inherent complications, which should be explained to the patient before
its application.
FP47. — CAN CAREFUL CLINICAL EXAMINATION AND RISK ASSESSMENT PRIOR TO NATIVE ARTERIO-VENOUS FISTULA CREATION HELP TO IMPROVE MATURATION RATES?

A native arterio-venous fistula (AVF) for as many patients as possible remains the challenge in the care for patients on hemodialysis. Primary failure remains high with risk factors such as female gender, diabetes mellitus, lower arm AVF and high age described. We wondered if our strategy of careful clinical examination prior to AVF creation and a preference towards upper arm AVFs in patients with any of these risk factors led to better maturation rates. The records of all patients who received a first AVF between January 2005 and December 2009 at our University Hospitals Leuven were studied retrospectively. Demographic data, including risk factors for primary failure, fistula characteristics and fistula outcome data were recorded and statistically analyzed. Of 344 patients enrolled, 156 (45.3%) received a lower arm and 188 (54.7%) an upper arm AVF. 38.6%, 28.4% and 9% of patients were female, diabetic or older than 80 years. Two hundred and seventy six (80.2%) came to maturation. Lower arm AVF (73.1% vs 86.2%; p = 0.0024) was a significant risk factor for non-maturation in this series. Female gender, diabetes and high age were not. Apart from female gender (62.4% vs 37.6%; p = 0.0218), no significant differences in distribution of risk factors in upper arm versus lower arm fistulas were found. Careful clinical examination prior to AVF creation together with integration of risk assessment in the planning of AVF is worthwhile. The same maturation rates can be obtained in the overall population as in risk groups and should not lead to under use of lower arm AVF.

FP48. — BANKING OF CRYOPRESERVED ARTERIAL ALLOGRAFTS. ASSESSMENT OF 20 YEARS ACTIVITY OF EUROPEAN HOMOGRAFT BANK (EHB) IN BRUSSELS.
R. Jashari, Y. Fan, B. Van Hoeck.
European Homograft Bank (EHB), International Association, Brussels, Belgium.

EHB collaborates with procurement and implantation centres in Belgium and other EU countries in donor selection and preparation, storage and distribution of cryopreserved arterial allografts. Arteries from donors 12 to 55 years of age were prepared in Class A laminar flow following Belgian, EU and EATB recommendations and standards. After morphologic evaluation and incubation in AB they are cryopreserved by control-rate freezing down to -100°C and stored in vapours of liquid nitrogen at below -150°C. Blood is tested for HIV, HTLV, HBV, HCV and Syphilis whereas for enteroviruses, Q-fever, malaria and Westnile virus by indication. Bacteriology for aerobes, anaerobes and mycotic and histology are performed. Three thousand five hundred and thirty three arteries were processed. Two thousand four hundred and twenty one (68.5%) were cryopreserved and stored, whereas 1113 (31.5%) discarded for morphology: 46%, contamination: 35%, serology: 6%, stock surplus: 4.5%, histology: 3.5% and surgical damages: 3%. Two thousand two hundred and ninety seven arteries were implanted: AA-110 AD-396, ABif-256, IA-138, FA-1176 and nvPC-221, Indications: infected prostheses or mycotic aneurysms: 80%, critical ischemia without available autologous material (15%) and 5% for paediatric cardiac surgery. No reports of re-infection of cryopreserved allografts and only few cases of graft occlusion were reported. FU information is received in about 50%, although it is systematically requested by the implanting surgeons. Cryopreserved arterial allografts are the devices of choice for infected prosthetic or native arteries and cases with no available autologous venous material. EHB cannot respond to all demands of the vascular surgeons due to shortage of stock. Therefore the vascular surgeons need to be actively involved in the donation and procurement of arteries.
FP49. — LAPAROSCOPIC OMENTOPLASTY AS TREATMENT FOR MEDIASTINITIS AFTER MEDIAN STERNOTOMY (video).
A.Z.-V.U.B., Brussel, Belgium.

Mediastinitis remains one of the most serious complications after median sternotomy. The treatment remains a challenge. In the past, omentoplasty was usually reserved as the last resort, mainly because of its donor site morbidity due to the laparotomy. In this video we describe a technique of laparoscopical harvesting and transposition of the omentum in the mediastinal cavity.

Between May 2008 and June 2010, six consecutive patients were identified and treated following our protocol that consists of early aggressive debridement, intravenous antibiotics, topical negative wound therapy and reconstruction with laparoscopic omentoplasty.

One patient developed a small wound dehiscence that was treated conservatively. Four out of six patients developed systemic complications. Three patients had pneumonia, which was complicated with an episode of acute renal failure in two patients. One patient had a transient episode of atrial fibrillation. The thirty day mortality was zero, although one patient died in hospital, forty-three days after the reconstructive surgery, of multiple organ failure due to pulmonary fibrosis. No patient died between hospital discharge and the latest follow up date. Follow up ranged between four and twenty-eight months. We observed good functional as well as esthetical results. The patient who had the small wound dehiscence in hospital suffered from a small substernal hernia at the latest follow up date.

The laparoscopic harvested omentoplasty is a valuable technique in the treatment of deep sternal wound infection with good functional and aesthetic results.

FP50. — STARTING UP PORT-ACCESS SURGERY FOR MITRAL VALVE PATHOLOGY, IS IT SAFE?
A CRITICAL REVIEW OF THE FIRST 140 PATIENTS AT THE LEUVEN UNIVERSITY HOSPITAL.
H. De Praetere, M. Pettinari, F. Rega, P. Herijgers.

To critically review our learning curve and to evaluate safety issues while starting up a port-access program for mitral valve surgery.

We performed a descriptive, retrospective study. Between March 2004 and December 2010, 140 patients underwent port access mitral surgery (M/F : 80/60), mean age 57, 42 ± 12.4 y (59[17-77]). Mean NYHA-class was 2.13 ± 0.79. 83 patients had MR of 4+/4, 53 MR of 3+/4, 20 suffered from MS, 57 had PHT and 57 had a dilated left ventricle. 45 Valves were classified as Barlow, 75 as FED and 20 as rheumatic. One hundred and five patients received a valve reconstruction, 35 needed replacement. Eighteen patients 25 concomitant procedures. Four conversions were necessary. No mortality, maximum MR of 1/4 in 136 patients. Significant reduction in CPB duration during the learning curve between first cohort and the following groups (pt1-20 : 192.05 ± 27.04 min ; pt21-40 : 140.2 ± 22.22 min (p < 0.05) ; pt121-140 :138.37 ± 26.45min (p < 0.05)), same significant reduction in cross-clamp-time. Mean ITE stay is 2 days (± 1.31), mean total hospitalization 9.22 days (± 3.27). Complexity of mitral valve reconstruction gradually increased and proportion of mitral valve replacement decreased.

Safety of minimal invasive mitral valve surgery is achievable even during the learning curve. Implementation of new equipment and techniques stays difficult. During our evolution from simple reconstructions / replacements to complex valve surgery with concomitant procedures, we could safely optimize our technique without mortality. Initial significant longer CPB in the first cohort did not result in longer hospital stay.
FP51. — VASCO
S. Delalieux, M. Van Betsbrugge, B. Thomas, R. Deleersnijder.
A.Z. St.-Augustinus, Antwerp, Belgium.

Vascular access failure is a problem in hemodialysis. Autogenous arteriovenous (AV) anastomosis is standard, prosthetic loop can be considered if failing. Although 1-year primary unassisted patency rate is 49%, infection rate (10%), aneurysms (2%) and steal syndrome (12%). We prefer homologous saphenous vein allografts (VASCO).

In 1999 we started using incompetent saphenous veins with good quality, diameter (5-7 mm) and length (at least 10 cm). Donor blood is controlled for infectious diseases. The vein is preserved in antibiotics (1 to 4 degrees Celsius) and prepared in our vascular lab after 6 weeks. 6 weeks afterwards we can implant. Preoperatively we perform duplex scanning to evaluate recipient veins suitable for autogenous anastomosis or VASCO. Data for this study are based on registration documents for VASCO, operation protocols, 6 month dialysis reports and follow up notes on dialysis.

Since 1999, 188 different patients (90 female, 98 male pts) with a mean age of 64 (range : 18-87) had VASCO. 244 VASCO’s were used. The 1 year unassisted primary patency was 59%, the median time to first revision 8 months (range : 1 to 36) due to thrombosis (30%), pseudo-aneurysm (3%), steal phenomenon (3%) and infection (2%). The secondary assisted 1 year patency with thrombosis as leading factor (71%). Fistulitis occured in 5 pts.

Reconstructing AV fistula with VASCO is a good alternative to PTFE grafts in older, comorbid hemodialysis patients. Saphenous vein allografts have better unassisted primary patency and less infection risks.

FP52. — ARE ADVERSE POSTOPERATIVE EVENTS AFTER AVR PREVENTABLE BY EARLY REFERRAL?
W. Mistiaen, Ph. Van Cauwelaert, Ph. Muylaert
1Artesis University College, Antwerp, Belgium ; 2A.Z. Middelheim, Antwerp, Belgium.

Need for urgent aortic valve replacement (AVR), the occurrence of preoperative heart failure (CHF), decrease of ejection fraction (EF) below 50% and high NYHA class all are possible indicators for advanced aortic valve disease and relate to a delay in referral for AVR.

Retrospective file study of 1000 consecutive patients who underwent AVR for degenerative aortic valve disease. 530 patients were male. The mean age was 75 (71-77) years and 610 also underwent CABG. 22 preoperative (demographic, valve-related, cardiac and non-cardiac factors, need for urgent AVR) and 5 peroperative factors (mitral valve ring, aortoplasty, need for CABG, valve size, cross clamping time) were screened by a univariate Fisher-exact analysis. The predictors were identified in a second step by logistic regression multivariate analysis.

For hospital mortality, need for urgent AVR (p < 0.001, Odds Ratio 9.0, 95% Confidence Interval 2.8-28.7) was the dominant predictor. Need for digitalis (p = 0.002 OR 3.5, 95%CI 1.6-7.7) and age > 80 (p = 0.005 ; OR = 3.1 95%CI = 1.4-6.6) followed. For postoperative CHF, need for urgent AVR was also dominant (p < 0.001, OR = 10.5, 95%CI = 3.6-30.8). Atrial fibrillation (p = 0.001, OR = 3.5, 95%CI = 1.7-7.4) and EF < 50% (p = 0.055, OR = 2.1, 95%CI = 1.0-4.4) were less important. For ventricular arrhythmia, previous infarction (p = 0.025, OR = 2.4, 95%CI = 1.1-5.0) were identified. For thrombo-embolic event only EF < 50% (p = 0.027, OR = 2.5 ; 95%CI = 1.1-5.7) was identified.

Need for urgent AVR is the dominant predictor for postoperative mortality and CHF. Once a degenerative aortic valve disease becomes symptomatic, prompt referral could prevent need for urgent surgery, when all compensatory mechanisms to maintain an adequate circulation are exhausted. This probably diminishes the occurrence of adverse postoperative events.
FP53. — TOTALLY LAPAROSCOPIC AORTOBIFEMORAL BYPASS FOR OCCLUSIVE AORTO-ILIAC DISEASE: RESULTS OF A SINGLE CENTRE OVER 7 YEARS.
C.H.U. Sart Tilman, Liège, Belgium.

The study objective was to describe and evaluate our single centre experience with totally laparoscopic bypass surgery compared with conventional open surgery to treat aorto-iliac occlusive disease. It concerns a retrospective non randomized study comparing 251 consecutive patients presented aorto-iliac occlusive disease, treated with totally laparoscopic procedure (group I, n = 95) and with a conventional open procedure (group II, n = 156). Demographic data, operative data, postoperative recovery data, complications, follow-up, morbidity and mortality were analysed according to the laparoscopic and conventional open group. Laparoscopic aortobifemoral bypass (LABF) required an operative time of 242 minutes and open aortobifemoral bypass (OABF), 200 minutes. The mean aortic cross clamping time was 62 minutes in group I and 33 minutes in group II. Mean blood loss was more important in group II (1010 ml Vs 682 ml). The average length of hospital stay was 8.1 days for LABF compared with an average of 12 days for OABF. In 22 cases (23%) conversion to open surgery was necessary in the laparoscopic group. Systemic morbidity was significantly higher in the OABF group with a thirty-day postoperative mortality of 2%. There was no hospital mortality in the laparoscopic group. Analysis of the results shows that laparoscopic aortobifemoral bypass for aorto-iliac occlusive disease is a safe procedure. The statistically significant advantages of LABF observed in the majority of our patients were decreased blood loss, faster post-operative recovery and shorter hospital stay. In the two groups, late morbidity attributable to the bypass prosthesis was minimal compared with other causes.

FP54. — EARLY EXPERIENCE WITH SINGLE-PORT LAPAROSCOPIC NISSEN FUNDOPPLICATION IN A CHILD.
A.Z.-V.U.B., Brussel, Belgium.

The laparoscopic Nissen fundoplication has largely replaced the open procedure for surgical treatment of gastro-oesophageal reflux disease (GORD). Single incision laparoscopic surgery (SILS) is one of the newest branches in minimally invasive laparoscopy. We report our first experience with a single incision laparoscopic Nissen fundoplication in a child. In this article we present an 8-year-old boy with refractory reflux oesophagitis, who was a candidate for Nissen fundoplication. A SILS-port was inserted through a 2 cm umbilical incision. Conventional laparoscopic instruments were used to perform the procedure. A Veress needle was introduced in the right hypochondrium to retract the liver. The operation time was 70 minutes. The peri- and postoperative evolution was uneventful. We encountered difficulties with the use of the conventional laparoscopic instruments: intracorporeal suturing using conventional instruments was challenging because of lack of angulation of the instruments. SILS Nissen is feasible in paediatric patients. Development of laparoscopic instruments specific for children would facilitate this SILS procedure. There is need for curved and articulating instruments for paediatric SILS procedures.
Royal Belgian Society for Surgery

Abstracts of Lectures
3. — HOW TO DEAL WITH A HIATAL HERNIA DURING AND AFTER BARIATRIC SURGERY.
J. Himpen.
St Blasius Ziekenhuis, Belgium.

Up to 40% of obese patients suffer from gastro-esophageal reflux disease (GERD) (1). There is a definite link between GERD and hiatal hernia (HH) (2). HH is a frequent finding in bariatric surgery (3). Whereas HH constitutes a relative contraindication for restrictive surgery (4) some consensus exists as to the need to treat HH whenever encountered during the procedure of AGB (5) or SG (6). In contrast, HH does not contra indicate Roux en Y gastric bypass (RYGB) but guidelines about the need to fix the HH are less clear (7). Nevertheless, we think that HH must be looked for actively and fixed whenever found during all bariatric procedures, including RYGB. We present a number of cases where a HH had been left untreated with significant ill effects. Finally, it seems that HH can develop de novo after bariatric procedures. It is likely that the dissection of all attachments of the gastro-esophageal junction is responsible for this evolution. We will show a short video in a patient who developed de novo a very symptomatic HH after SG, and another after RYGB.

In conclusion we can state that HH is an important clinical entity in bariatric surgery, both as a pre-existing and as a de novo condition. When present, this condition should be addressed by a specific surgical technique as intrinsic part of the bariatric operation.

References

5. — TIPS AND TRICKS IN LAP SLEEVE GASTRECTOMY.
B. Dillemans.
A.Z. St Jan, Brugge, Belgium.

The laparoscopic Sleeve gastrectomy (LSG) is increasing in popularity as a surgical treatment modality for morbidly obese patients. It has some specific advantages towards the band and gastric bypass, but its long term effect (> 5 years) in terms of weight loss maintenance is unknown. Moreover, although LSG looks to be an easier operation than the gastric bypass, its reported morbidity rate in terms of postop leakages, is high. A recent multicentric randomized trial in Germany revealed a leakage rate of 7% after a LSG versus 0.8% for the gastric bypass. *A possible explanation can be found in the higher intraluminal pressure in the remaining (sleeve) stomach, but surgical technical failures are probably more important.

Tips and tricks in performing a gastric sleeve and in preventing a stenosis/leak are expounded.

7. — **TRANSVAGINAL CHOLECYSTECTOMY.**
F. Berrevoet.
*U.Z. Gent, Gent, Belgium.*

Natural orifice transluminal endoscopic surgery or NOTES is gaining interest in the surgical community, but is still in its infancy. However, so-called hybrid procedures are being explored more frequently as a transitional phase in this evolution.

The hybrid transvaginal cholecystectomy with no visible scars is easy to perform because the degrees of freedom when using the different instruments and working channels are better preserved. Considering ergonomy, taxonomy and available instrumental one curved clamp is necessary to retract the gallbladder to the right, opening Calot’s triangle. No extra costs are necessary. Our experience so far shows close to equal operating time as in normal laparoscopic cholecystectomy, extremely satisfaction among the female population and, in case of good patient selection no increased post-operative complication rate. No pain or dyspareunia was seen in these women.

The limitative aspects involve patient gender, previous gynaecological procedures and inflammation of the gallbladder.

The evolution towards NOTES is moving rapidly. Improvements in available instruments and technology are needed to extend the available experience. For the moment, although limited by gender, the transvaginal approach is easier to perform and has our preference compared to single trocar procedure.

---

8. — **INFORMED DECISION-MAKING IN BREAST SURGERY.**
S. Van Slycke.
*O.L.V. Klinik, Aalst, Belgium*

Quality of healthcare is a hot topic, especially true in cancer care. Medical doctors are widely encouraged to share decision-making with their patients. However, the assumption that responsibility for decisions is an objective quantity which can be apportioned between doctors and patients is problematic. Surgeons routinely make decisions for patients and only explicitly offer choices where treatment options are clinically equivocal. Therefore shared decision-making is absent and surgeons might be considered as having neglected the patient’s autonomy. Nevertheless, patients generally feel ownership of the decisions surgeons made for them, because surgeons provide justifying reasons and patients know that they cannot refuse. Conversely, faced with choice, patients generally lack trust in their own decisions and usually search the surgeon’s guidance. Subjective as well as procedural elements of decision-making must provide a broader perspective to optimise the surgeon’s making behaviour. However respecting the patient’s autonomy does not safeguard their interests, and further research will be necessary to find the ideal balance.
Minimally invasive surgical procedures in the upper gastrointestinal district are technically complex operations. Although MIS improves quality of life, it should be ensured that this access truly reduces morbidity and mortality. Quality criteria include intra-operative and postoperative complications, postoperative stay, readmissions, and long-term results: all those depend on hospital and surgeon volume of cases. MIS acquired the role of gold standard for treatment of achalasia, gastro-esophageal reflux disease, hiatal hernia and epiphrenic diverticula in highly specialized centres;Zenker diverticula with appropriate features are also a formal indication to MIS through transoral approach. In gastric cancer, minimally invasive treatments, such as endoscopic submucosal resection for early gastric carcinoma and laparoscopic gastrectomy proved safe, reliable and effective. In esophageal cancer, great variation exists in the outcomes and is generally accepted that this is a direct consequence of the experience of the surgical team. Despite considerable improvements during the last decades, overall and pulmonary complication rates have remained high to encourage the search for alternative operative techniques, such as MIS, that could potentially achieve similar rates of cure with lower morbidity. Recent literature indicate that in gastric and esophageal cancer, MIS has potentially favourable outcome in terms of operative blood loss, recovery of gastrointestinal function, and hospital stay with lower complication rate and similar long term survival. Our experience in MIS in esophagectomy for cancer (141 out of 249 cases) showed a lower rate of intra-operative complications in the mini invasive group, while MIS and open surgery are comparable in terms of length of stay, postoperative complications, and long-term results. In gastric cancer, MIS (34 out of 203 gastric resections) showed an advantage in terms of length of stay (statistically significant) and postoperative complications (although not statistically significant), demonstrating the feasibility of this approach. Table 1 shows the attitude of our institution in MIS approach to upper GI diseases.
10. — QUALITY CRITERIA IN THORACOSCOPIC UPPER G-I PROCEDURES.
1Zithaklinik Luxembourg, G-D. Luxembourg, 2U.Z. Gasthuisberg, Leuven, Belgium.

Quality assessment in surgery should not focus on simple outcome measurements such as mortality, morbidity or length of hospital stays. Modern quality assessment rather focuses on the whole process of care and tries to analyze a complete pathway. This concept cannot easily be extrapolated to upper GI surgery, because few, if any, comparative data are available for most surgical pathways in upper GI surgery.

Today, huge variations exist in the outcome of surgery for cancer of the oesophagus and GEJ. Expert centres report large series of radically operated patients with 5-year survival rates usually exceeding 35-40%. Conversely, nationwide databases and review papers still conclude that trans-hiatal and transthoracic resections achieve similar poor oncological outcome, with overall survival as low as 15 to 20%. Limited "evidence based" data being available for oesophageal cancer surgery, much of our knowledge is based on large series that may be heavily biased by variations in patient selection.

Overall, it appears that for oesophageal cancer surgery, mortality is still a relevant outcome measurement, as it not universally low (e.g. below 3%).

For benign diseases, such as antireflux surgery, mortality and major morbidity should be minimal, wherever it is performed. Hence, differences in quality can only be appreciated using follow-up criteria (e.g. long term reflux control, hernia recurrence or quality-of-life data…) that are much harder to assess and compare. This is why few studies have analyzed such quality aspects of functional upper GI surgery.

This presentation aims to overview the different quality aspects and available data available, for cancer, as well as benign conditions requiring upper GI surgery.

L. Michel.
Mont Godinne, Belgium.

A rapid historical survey of our current health care system will be presented going back from Stéphane Hessel to William Beveridge.

The impact of metaphors on the actual perception of the quality of health care will also be briefly developed going from the military metaphor represented by the surgical strike type of health care to the more trivial economics type.

In addition, the impact of those metaphors for the ones practicing surgery and for the others benefiting of surgery is further confused by an environment where legislation - not to say legalism - in health care is more and more invasive. In addition, the loose and variable use of legalistic terms can interfere with discussion of the real issues. Quality of care in Surgery could indeed benefit from better communication with authorities and suspicion would decrease if terms such as liability, responsibility, efficiency, effectiveness, cost effective were used less frequently and more precisely.

In the bylaws of the RBSS modified in 2000, the Society singled out several new objectives. Among them, there was the objective to promote studies, progress and innovation, teaching, and diffusion of surgical knowledge : in other words Quality of Surgical Care.

To reach those objectives, sound legislation can make a positive difference by adding ways and means in order to encourage and support scientific population based studies which are the basic must of sound modern evidence based surgery. On the contrary, legalism can make a negative difference by forcing the clinicians into the Procrustean bed of controlled and administrative protocol driven surgery.

As we are practicing surgery in an era of cost-containment and strictly controlled health care resource allocation, our tireless efforts to improve the quality of current surgical practices should be more widely spread and be better known by the public. This could hopefully cool down the latent and overt conflicts arising between the macroeconomics of health care resource availability, with its related political willingness towards efficient and fair allocation, and the microeconomics of effective care delivered by first-line practitioners caring for one patient at a time and fearing for their professional autonomy.
17. — ENHANCED RECOVERY WITHOUT REAL FAST-TRACK PROTOCOL.
J. Van de Stadt, M. Corbeau.
Hôpital Erasme, Bruxelles, Belgium.

Optimization of the management of hospitalized patients is a major concern today. In colorectal surgery, the concept of enhanced recovery has been popularised by mean of “fast-track” protocols, aiming at patient’s discharge on postop day 2. Nevertheless, a fast-track protocol has several limitations: it is very demanding for the patient and therefore applicable to a limited selection of patients only; it requires a strong team work and therefore is not possible in every institution.

In order to optimize globally the postoperative recovery of every patient undergoing an elective colorectal resection in our institution, we set up in 2008 a “soft” enhanced recovery programme. This was mainly based on the suppression of useless or outdated habits, improvement of postoperative feeding, mobilisation and analgesia.

After 18 months of this programme, a retrospective analysis was conducted in order to evaluate the respective impact of every modification on the length of hospital stay.

This study points out the evolution of the habits with time, and the limitations to changes application into practice.

Conclusion: It is possible to optimize globally the recovery after elective colorectal resection, outside a real fast-track protocol.

18. — SACRAL NERVE STIMULATION: THE GOLDEN STANDARD FOR FAECAL INCONTINENCE?
U.Z. Gent, Gent, Belgium.

Faecal incontinence (FI) affects approximately 2% of the population and possible treatment options or algorithm are not well known.

Faecal continence requires a normal pelvic anatomy, sphincter muscle and sphincter innervation. Other factors, such as cognitive function, stool consistency, rectal capacity, colon transit, anorectal sensation also play a role.

Sacral nerve stimulation (SNS), as a non-invasive, rather new intervention, possible on outpatient basis, seems to be a promising technique with reported improvement in continence in 35-100% of the patients.

By review of the literature and based on a single centre experience the place of SNS in FI will be tried to clarify.

The first step in the treatment of FI is non-surgical with dietary advice, drug treatment, biofeedback (bulking agents, retrograde irrigation). Where SNS was initially introduced for idiopathic FI, it can play a role as primary treatment in patients with an external anal sphincter defect as the long term results of sphincter repair are disappointing (long term 35-50%).

All patients had a percutaneous nerve evaluation test (PNE) with a temporary lead during 14 to 20 days. Complications were dislocation of the lead or breakdown at its connection point, requiring a re-intervention. The success rate (more than 50% improvement of incontinence episodes) of PNE is around 80%. PNE success rate is a very good predictor for success of the definitive implant (correlation of 90%). The underlying aetiology seems to play a role in the success rate.

There is an improvement in FI, rectal sensation, urgency, frequency with a significant higher quality of life. The infection rate of battery and/or lead is low. Beside the need to replace an empty battery, there is a low revision rate (disconnection, pain at the implantation site, decreased function).

In one case of sacral bone deformity after oncologic surgery pudendal nerve stimulation via percutaneous perineal approach was successful.

SNS gives encouraging results in patients with FI, also with external anal sphincter defects or other aetiologies as previous colorectal or pouch surgery, spinal cord injury or muscular dystrophy. The working pathway is still unclear, but SNS seems to influence more than only the pelvic floor. The effect remains stable on medium-term. Only a few long-term studies of SNS are available.
20. — LAPAROSCOPIC TME.
Y. Van Molhem.
O.L.V. Kliniek, Aalst, Belgium.

In the laparoscopic treatment of colon cancer is now widely accepted as the standard of care. However, the laparoscopic approach for rectal cancer remains controversial. More and more data suggest a good short and long term outcome in experienced hands. Technically, low laparoscopic anterior resection still is very challenging and can jeopardize a good TME-quality and oncologic result. A review of the recent literature and of our personal series of more than 550 cases will focus on the morbidity, especially the leakage rate, and on the oncological outcome.
The disadvantages and benefits of the laparoscopy are discussed and some technical tips are shown in a short video.

21. — DEFUNCTIONING STOMA FORMATION AND LEAK RATE AFTER TOTAL MESORECTAL EXCISION.
F. Penninckx, K. Beirens.

Anastomotic leakage (AL) after total mesorectal excision (TME) with colo-anal reconstruction is a major adverse event. Routine or selective construction of a defunctioning stoma (DS) reduces the morbidity of AL. This study aims to illustrate the AL rate and its related morbidity with and without primary stoma formation.
Between January 2006 and March 2011, 1912 patients who underwent elective TME with colo-anal reconstruction for invasive rectal adenocarcinoma up to 15 cm above the anal verge were registered in the PROCARE database. A primary DS was constructed in 1183 patients (62%). Early AL rate and its related morbidity (re-operation rate, length of stay, in hospital mortality) were analysed.
In patients without early leak, in hospital mortality was 1.1% (0.6-1.6 95% CI) and the mean length of stay (LoS) was 14.7 days (13.1-16.3 95% CI).
In the presence of a primary DS, early AL rate was 4.3% (3.2-5.5 95% CI), requiring re-operation under narcosis in 40/51 (78%) with a mortality of 0% and resulting in a mean LoS of 32.9 days (25.5-40.3 95% CI).
In the absence of a primary DS, early AL rate was 10.2% (7.9-12.3 95% CI), requiring re-operation under narcosis in 69/74 (93%) with a mortality of 7.3% (1.1-13.4 95% CI) and resulting in a mean LoS of 34.2 days (29.5-38.9 95% CI). Construction of a primary DS significantly reduced the incidence of early AL (p < .001), re-operation rate (p < .001), and LoS (p < .05). The clinically relevant difference in postoperative mortality did not reach the level of statistical significance. Surgeons/teams participating in nation-wide projects should be informed about their performance. Benchmarking should result in re-action, including e.g. routine construction of a DS, when appropriate. This could result in relevant decreases of postoperative morbidity, mortality and length of hospital stay.
22. — QUALITY OF LIFE AFTER COLORECTAL SURGERY.
R. Chamloo.
Clinique St Jean, Bruxelles, Belgium.

Quality of life (QoL) is used in health care to refer to an individual’s emotional, social and physical well being, including their ability to function in the ordinary tasks of living. In addition to traditional endpoints, such as survival and disease recurrences, assessing QoL is necessary to provide a comprehensive understanding of the outcome of surgery and other forms of treatment. Several general and specific QoL questionnaires have been described but there is still a lack of a standardized specific score of QoL for patients with rectal cancer. Several items such as sphincter saving procedure versus abdomino-perineal resection, functional result after sphincter saving resection, impact of preoperative radiotherapy and impact of laparoscopy on QoL will be discussed.

To improve QoL in patients suffering from rectal cancer, the realisation of clinical trials with a standardized specific questionnaire is needed.

25. — TRANSCUTANEOUS AORTIC VALVE IMPLANTATION (TAVI): 2010 POSITION STATEMENT FROM THE BACTS.
P. Herijgers.

The introduction of transcutaneous aortic valve implantation is a promising technique for patients with severe, symptomatic aortic valve stenosis that are deemed inoperable or high risk patients. The introduction of this technique might however be inadequately applied to lower risk patients and have significant impact on outcomes for the patient and on the profession of the cardiac surgeon. Furthermore, this new technology is expensive. The scientific and professional associations have to consider which conditions should be met to allow safe and appropriate introduction of these new and expensive technologies.

After a thorough literature review, including published articles and presentations on international congresses, the board of the BACTS has discussed the evidence and adopted rules concerning the safe introduction of TAVI in clinical practice. Since this field is in full development, the position statement was reviewed annually. The one presented here is adopted in December 2010 and is valid until December 2011.

After presentation of the evidence, including the results of the randomized PARTNER trial, the position statement will be detailed and discussed.

For most patients surgical aortic valve replacement is the golden standard, which is widely available in Belgium and performed with good results. Relevant international guidelines and position statements should be followed. The inclusion and exclusion criteria of the devices should be carefully followed. Preference of the patient is not sufficient to prefer TAVI over surgical aortic valve replacement. The patient should have sufficient anticipated survival after implantation of the aortic valve prosthesis to justify the considerable cost and effort. In the early phase of implementation of TAVI, its use should be restricted to centres with a vast experience in heart valve surgery. Reimbursement should be made dependent on participation in a database to acquire more knowledge concerning this procedure.

The scientific and professional medical associations are able to build balanced and evidence-based consensus statements on the introduction of new technology. The authorities should consult the relevant associations before introducing reimbursement for new technologies.
26. — VATS LOBECTOMY: ARE ONCOLOGIC PRINCIPLES PRESERVED?
Y. Sokolow.
Hôpital Erasme, Bruxelles, Belgium.

Video-assisted thoracic surgery (VATS) lobectomy has recently become an alternative of open thoracotomy (OT) for the treatment of early-stage non-small cell lung cancer (NSCLC). The VATS technique has many approaches, depending on the surgeon’s preference.

VATS lobectomy has been demonstrated to be safe and effective procedure and systematic node dissection (SND) by VATS is technically feasible and comparable to open thoracotomy SND regarding morbidity, number of dissected nodes and number of stations sampled.

Several studies have noted that VATS lobectomy results in improvements in postoperative pain control, earlier discharge, lower complication rates, lower inflammatory response, better pulmonary function in the early postoperative phase, earlier return to normal activities and higher completion rates of postoperative chemotherapy compared with OT.

In term of oncological results, some retrospective studies have shown that VATS lobectomy is associated with an improved long-term survival after resection compared to OT.

VATS lobectomy respects all the thoracic oncological principles and is a reasonable alternative to open thoracotomy for the treatment of early-stage non-small cell lung cancer (NSCLC).

27. — TECHNIQUES.
H. Decaluwe.

The standard approach to pulmonary lobectomy has been via rib-spreading thoracotomy under direct vision. In an effort to lower associated morbidity, minimal invasive techniques were developed and reported in the 1990’s. Ten years later, 20% of lobectomies in the voluntary database of the Society of Thoracic Surgeons were performed via VATS (1).

Absolute contraindications are inability to achieve complete resection, active N2 or N3 disease or inability to maintain single lung ventilation (2).

It is generally accepted that a VATS lobectomy technique includes the following principles: no rib spreading; a maximum length of 8 cm of the access incision for removal of the lobectomy specimen; individual dissection of the hilar structures; standard node dissection identical to an open thoracotomy; specimen removal within an impermeable bag (3, 4).

Different approaches had been developed: 1) mimicking ‘open’ lobectomy through dissection of the fissures, 2) posterior approach, 3) anterior approach, 4) robotic.

The anterior approach is the most spread at the moment. Focusing on ‘hilum first and fissures last’ principle, one can lower development of air leaks (2) and become independent of the quality of the fissure to achieve a successful resection.

The dissection of the hilum is started anterior. The appropriate vein is divided first. Bronchus or separate arteries are divided, the order of them depending on the anatomy from anterior to posterior of the different lobes. Fissures are completed with endostaplers.

The presentation shows, step-by-step, anterior orientated VATS lobectomy procedures, focusing on the hilar anatomy of the different pulmonary lobes.

References
The long-term goals of lung cancer surgery include cancer control, survival and quality of life (QoL). In a patient population with a high mortality rate, evaluation and preservation of QoL after treatment is imperative. Pulmonary resection by video-assisted thoracic surgery (VATS) has become an alternative approach for early-stage lung cancer. Several reports have suggested benefits of VATS such as decreased postoperative pain, preservation of pulmonary function and increased survival rate. Given the apparent equivalent survival outcome between both access techniques, QoL assessments become increasingly important to guide clinical decision making regarding selection of treatment option. Several reports compared the postoperative QoL evolution between VATS and thoracotomy (Table I). In general, VATS patients had an earlier return to preoperative activity and reported less pain and dyspnoea burden in the immediate postoperative period. Despite this favourable effect of VATS, it is especially seen in the first month after surgery. This review presents the basic concepts of QoL research, several commonly used QoL measurement instruments, and a summary of the available data on QoL evolution after VATS lobectomy compared to the classic approach by thoracotomy. The influence of preoperative lung function, age of the patient, lung cancer stage and adjuvant treatment on QoL after VATS lobectomy are discussed.

Table I

<table>
<thead>
<tr>
<th>author</th>
<th>year</th>
<th>study design</th>
<th>conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fortser</td>
<td>2002</td>
<td>prospective study</td>
<td>VATS significantly better shoulder function and pain when coughing immediately postoperatively no significant differences after day 4 with exception of pain and coughing.</td>
</tr>
<tr>
<td>Long</td>
<td>2007</td>
<td>prospective study</td>
<td>at 1 month after VATS dyspnoea and pain were significantly lower compared to the thoracotomy group no significant differences at 6 months.</td>
</tr>
<tr>
<td>Downey</td>
<td>2007</td>
<td>meta-analysis consensus statement</td>
<td>patient satisfaction and QoL scores generally did not differ between VATS and open lobectomy. Although some physical function subscores differed significantly over the short term and midterm (shoulder strength, arm/shoulder functionality scores), overall patient reported physical function scores did not differ between groups at 3-year follow-up.</td>
</tr>
<tr>
<td>Cheng</td>
<td>2007</td>
<td>meta-analysis</td>
<td>VATS lobectomy results in less pain, and more rapid return of normal functioning. However, after 3 months there is no difference in pain, and overall quality of life.</td>
</tr>
<tr>
<td>Hardy</td>
<td>2010</td>
<td>prospective study</td>
<td>VATS patients reported better QoL compared to preoperative values. After lobectomy by thoracotomy worse physical and social functioning were seen. At 6 months after surgery, no significant differences were seen between VATS and thoracotomy.</td>
</tr>
</tbody>
</table>
33. — LAPAROSCOPIC ADJUSTABLE BAND PLACEMENT.
B. Dillemans.
A.Z. St Jan, Brugge, Belgium.

Despite additional behavioural, dietary and psychiatric counselling, up to 15% of patients having undergone a Roux-en-Y gastric bypass (RYGB) will face insufficient weight loss or weight regain on the long term (> 2 yrs.). In considering a surgical re-intervention, a lot of revisional procedures have been described with a wide range of invasiveness, from endoscopic procedures as suture plications towards the conversion to a Duodenal Switch. As the majority of the failures of these RYGB patients are attributed to the loss of restriction by time, putting an adjustable gastric banding on top of the pouch can effectively reduce hunger and increase satiety. Short and midterm results are promising, with a reported additional Excess Weight Loss ranging from 38% (IRANI et al.) to 47% (BESSLER et al.) after 26 and 60 months respectively. The postoperative morbidity in these studies was low, but band related problems necessitated a surgical revision in 10 and 15% respectively. More data and a longer follow-up are needed to draw any further conclusion.

35. — CONVERSION TO A DISTAL GBP.
L. Lemmens.
AZ Nikolaas, Sint-Niklaas, Belgium.

The gastric bypass (GBP) is one of the most frequently performed surgical procedures for the treatment of the morbidly obese patients and is by many still considered as the gold standard. The mean excess weight loss amounts to 75% in the first 2 till 3 postoperative years. Long term results however only show a 60% excess weight loss and this because of an important weight regain in around 30% of the bypass patients! The cause of the weight regain after the standard gastric bypass is not clear at this moment and is multi-factorial: loss of restriction because of dilatation of the gastric pouch and especially of the proximal jejunum, disappearance of dumping, re-appearance of hunger and others. Surgical solutions are few: 1) resize the pouch in case of dilatation with or without adding a band. 2) adding mal-absorption: conversion of the GBP into a distal gastric bypass (DGBP), which is equal to a biliopancreatic diversion (BPD) with just a smaller gastric pouch, or changing the GB into a sleeve gastrectomy (SG) and if necessary later into a bilipancreatic diversion with duodenal switch (BPD-DS). Adding mal-absorption can only be advised in case of complete disappearance of any restriction. Adding mal-absorption to gastric restriction is potentially dangerous because of the risk of protein mal-nutrition.

Changing the GBP into a DGBP is a technically easy and safe procedure. The conversion of a GBP into a sleeve gastrectomy (SG) is technically more demanding with a higher leak risk. The BPD-DS can be performed in a 2nd step. The results on weight loss are very good, but the patient has to accept the side effects and the follow-up of the mal-absorptive surgery.

Data from literature confirm our own results that after conversion to a DGBP, patients can achieve the same weight loss as in a primary operation. The procedure is safe without anastomotic or other complications. Conversion of GBP into a SG and eventually later into a BPD-DS is technically more demanding with a certain leak risk. The late complications are the same as in the primary mal-absorptive surgery.
Abstracts of Lectures

36. — RATIONALE OF THE MINI GASTRIC BYPASS.
J. Himpebs.
St Blasius Ziekenhuis, Belgium.

The laparoscopic Roux-en-Y gastric bypass (LRYGB) is the paradigm in weight loss surgery, owing to its low complication rate and its excellent results as a weight reducing and metabolic operation. However, late undesired side effects like internal hernia’s, glucose metabolism issues (recurrence of initially put in remission type II diabetes mellitus and postprandial symptomatic hypoglycemic insults) and obesity recidivism have somewhat tapered the enthusiasm for this procedure.

The laparoscopic mini gastric bypass (MGB, also called loop-, sleeved, omega or BII gastric bypass) was popularized by Dr Rutledge in the late nineteen nineties. It is a quick, straightforward and easily reproducible surgical procedure and carries excellent weight loss results. Its opponents claim that this simple operation mimics the Billroth II gastrectomy, hence could expose the patients to the hazards of gastric stump carcinoma, distal esophageal inflammation and cancer, and chronic anastomotic ulcers.

We believe nonetheless that the LMGB deserves recognition as a valid bariatric procedure, which definitely has advantages outweighing the downside aspects. The mere absence of an isolated alimentary loop could in our opinion do away with the late metabolic and anatomical disadvantages of the Roux-en-Y construction. Moreover, possible undesired effects caused by reflux from the afferent loop into the gastric pouch are minimized by the technique of constructing the gastro-enteral anastomosis. In addition, these effects can easily be monitored endoscopically, and, should they occur, they can swiftly be corrected by transforming the LMGB into a LRYGB.

39. — THE MINI GASTRIC BYPASS VERSUS THE RNY GASTRIC BYPASS.
"PRO MINI GASTRIC BYPASS".
Hôpital Européen Georges Pompidou, Paris, France, King Abdulaziz University Hospital, Jeddah, Saudi Arabia.

Laparoscopic “Omega” Gastric Bypass (LOGB), also known as Mini Gastric Bypass, is as effective as Roux-en-Y Gastric Bypass (RYGB), but has the advantages of a unique anastomosis and lower morbidity. Our objective is to evaluate the safety and mid-term effectiveness of this new surgical strategy in the treatment of morbid obesity.

Between October 2006 and December 2010, 451 patients (354 women) underwent LOGB. Mean age was 41,62 year old [+/- 10,94], mean pre operative weight was 132,7 kg [+/- 25,05] and mean BMI was 47,4 kg/m² [+/- 7,43]. 103 patients (22,8%) had undergone a restrictive operation for weight control : 78 gastric banding, 11 vertical banded gastroplasty and 14 sleeve gastrectomy. Patients were followed up 1 (n = 291), 2 (n = 193) and 3 years (n = 75) after LOGB.

Early morbidity was 3,4% (n = 14). 8 patients were treated surgically : 3 intestinal obstructions, 2 perigastric abscesses, 2 anastomotic leaks and 1 intra abdominal hemorrhage. The remaining : 2 anastomotic hemorrhages treated endoscopically, 2 pulmonary embolisms, 1 purulent drainage and 1 rhabdomyolysis. Late morbidity was 2,2% (n = 10).1 patient presented with perforated excluded gastric remnant following intestinal occlusion of the biliary limb secondary to anastomotic stricture on an anastomotic ulcer, 6 peptic ulcers (1,3%), 1 anastomotic stricture endoscopically dilated and 2 symptomatic cholelithiasis. No death was reported. At 2- and 3-year follow-up, mean BMI decreased to 30,6 +/- 6,8 and 30,3 +/- 5,9 kg/m², and mean EWL was 76,3% +/- 12,6 and 77,1% +/- 14,1, respectively. 7 patients complaint of biliary reflux (1,5%), 2 of them with persistent symptoms.

LOGB is an effective procedure for morbid obesity with comparable mid-term outcomes to RYGB ; however it seems to be safer with no mortality and lower morbidity. Its technical simplicity represents a real advantage and makes it an interesting option that should be considered in the armamentarium of all bariatric surgeons.
40. — THE MINI GASTRIC BYPASS VERSUS THE RNY GASTRIC BYPASS. "PRO RNY GASTRIC BYPASS".
Y. Van Nieuwenhove.
U.Z. Gent, Gent, Belgium.

Obesity is a condition with increasing prevalence in the Western, but also in the Oriental society. There is a strong association of severe obesity with life-threatening co-morbidities, such as diabetes, sleep apnea, hypertension and micro-and macrovascular disease.

While conservative treatments do not seem to offer long-term resolution of this increased risk, bariatric interventions have shown, not only to achieve weight loss, but also to avoid or improve obesity associated co-morbidities. Because these interventions are of a prophylactic nature in the majority of cases, the chosen surgical intervention should be able to offer not only sufficient weight loss in severely obese patients, but also to guarantee a minimal short- and long-term surgical complication rate.

During the past decades, vertical banded and adjustable banded gastroplasty have been studied and have shown their limitations. More specifically, their failure at the long run does not allow proposing them as a first choice option. From the malabsorptive interventions (e.g. BPD and DS) the pronounced weight loss is associated with a number of other life-threatening conditions, such as protein malnutrition and end-stage hepatic failure. The Roux-Y gastric bypass technique has been studied in more than 5000 papers and can offer an acceptably low morbidity with an excellent result on weight loss and resolution of co-morbidities. Refinements or modifications of the technique should aim at lowering both short- and long-term surgical complications, while maintaining the results of weight loss and improvement of co-morbidities.

41. — THE GYNAECOLOGIST.
A. Locufier.
A.Z. St Jan, Brugge, Belgium.

Fetal abnormalities can often be diagnosed early in pregnancy and it has become a challenge to inform patients about the clinical outcome of these abnormalities. On the other hand, patients presume that all fetal abnormalities can be diagnosed during pregnancy. As this is not the case, it is the task of the obstetrician to inform the parents that certain abnormalities are only diagnosed after birth. The possibility to discuss interruption of pregnancy is legally possible by the Belgian Law, which provides 2 articles about pregnancy termination: 1/ pregnancy under 14 weeks amenorrhea and 2/ pregnancy with a non viable or critically ill fetus. The first group of pregnancy termination is normally registered, but underestimated and the second group is registered in case the birth weight is 500 grams in the SPE registration for Flanders (1986) and the CEpIP for Wallonia (2007). The diagnosis of a possible fetal abnormality and the counselling for it, starts at the beginning of the pregnancy. The counselling consists in providing information on screening pregnancy for aneuploidy, malformations on ultrasound, infections, pregnancy diabetes and pre-eclampsia. Both parents have the choice whether they accept screening during pregnancy or deny it. Obstetricians inform the parents about the possibility of detection of malformations, but also about the non detectable conditions. Obstetricians try to participate in “the ideal parent project” and to avoid wrongful birth and wrongful life. The diagnosis of fetal abnormality is, even for parents who are aware of the possibility of an abnormality in a planned and wanted pregnancy, a difficult subject to discuss. Primarily, professionals have to be on the same counselling level and be aware of the two major groups of abnormalities: a non viable group (anecephaly, holoprosencephaly, chromsome abnormality, bilateral kidney agenesis, skeletal dysplasia, …) and a viable group ( palatoschisis, hernia diaphragmatica, oesophagus atresia, gastroschisis, omphalocele, teratomas, …). Nowadays it is a multidisciplinary team who gives professional advice regarding management. The obstetrician will often be the coordinator of the prenatal counselling in the viable group. This is where the obstetrician, prenatal specialist, meets the surgeon, the neonatologist, radiologist, psychologist, ethics committee and most importantly, the parents, to plan the management: interruption of pregnancy, an invasive prenatal therapy (hernia diaphragmatica, TTS) or to proceed to a well prepared delivery and neonatal period.
**42. — THE RADIOLOGIST.**


*U.Z. Gasthuisberg, Leuven, Belgium.*

Prenatal screening, in particular fetal ultrasound (US), enables physicians to identify congenital anomalies before birth. In case of fatal or severe malformations, elective termination of pregnancy (TOP) might be considered. Accurate prenatal diagnostic and prognostic information is mandatory in this decision-making process. Prenatal magnetic resonance imaging (MRI) has proven to be an excellent adjunct to fetal US, not only in case of maternal obesity, oligohydramnios or fetal pelvic position, but also to help further differentiate complex fetal anomalies. The additional value of fetal MRI as an adjunct to US is investigated for severe congenital anomalies.

Between 01-Dec-2008 and 01-Mar-2011, postmortem autopsy examination was performed in 23 pregnancies following TOP for which both prenatal US and MRI were available. Postmortem examination consisted of high resolution MRI and X-ray imaging followed by conventional macroscopic and microscopic autopsy. Gestational age at the time of TOP ranged between 15 and 35 weeks (median = 26). Most frequent observed fetal anomalies on postmortem examination were central nervous system (96%), musculoskeletal (26%), urogenital (17%), cardiovascular (17%), digestive apparatus (17%) and respiratory system (13%). Multisystem pathology was present in 11/23 cases.

The correlation between prenatal US, MRI and postmortem examinations will be reviewed to illustrate the additional value of prenatal MRI in the decision-making for TOP.

**43. — THE NEONATOLOGIST.**

S. Vanden Eijnden.

*Hôpital Erasme, Bruxelles, Belgium.*

The abortion law in Belgium was significantly liberalized on 3 April 1990. The law permits abortion to be performed in the first 12 weeks of pregnancy when a woman judges herself to be “in a state of distress as a result of her situation”. After 12 weeks of pregnancy, an abortion may be performed only if two physicians agree that continuance of the pregnancy would gravely endanger the woman’s health or when it is certain that the child, if born, would be affected by a particularly serious pathological condition, recognized as incurable at the time of diagnosis. In these circumstances the Belgian law allows the pregnancy to be terminated up to full term, whereas most of the countries do not allow abortion for fetal anomaly beyond 22 to 26 weeks’ gestation. In France the law is similar but late termination of pregnancy has to be approved by Biomedicine Agency-certified centres called CPDPN. In contrast with Belgium, the French CPDPN centres must include a paediatrician who is involved in the decision of abortion for fetal anomaly. This discrepancy highlights the impact of the decision-making organization on the balance between the risk of eugenism and the respect of the parents’ autonomy in the termination of pregnancy. Much progress has still to be made in this highly sensitive domain.
44. — DIAPHRAGMATIC PLICATION FOR NEONATAL PHRENIC NERVE INJURY DUE TO TRAUMATIC DELIVERY: A CASE REPORT.
E. Van Der Veken, E. Van Hoorde, T. Khalil, F. Otte, P. Corouge, J. Papadopoulos.
Hôpital de Jolimont, Haine-Saint-Paul, Belgium.

A newborn baby, delivered at a gestational age of 36 weeks, suffered from severe respiratory distress after a traumatic birth due to shoulder dystocia. Initial non invasive ventilation was not sufficient and he was intubated. For the next 18 days, he was alternatively intubated or on CPAP, but he could never be weaned off mechanical ventilation for more than 12 hours. Chest X-ray was suggestive for diaphragmatic paralysis and US confirmed this diagnosis. On day 19, a right diaphragmatic plication was performed and on the second postoperative day the baby was successfully extubated. Respiration became normal within a few days. He presented also a plexus brachialis palsy treated by physio and electro-stimulation but with no improvement and for which surgery is planned. He is now 4 months old and presents normal respiration and normal chest X-ray.

45. — UNUSUAL LATE COMPLICATION OF HEMOLYTIC UREMIC SYNDROME.
M. Demarche, A. Lefevre, L. Rausin, I. Etienne, P. Erpicum.
C.H.R. Citadelle, Liège, Belgium.

Hemolytic uremic syndrome (HUS) is the most important cause of acute renal failure in children. Late gastrointestinal complications are rare but serious.

Methods: We report the case of a 5 years old boy hospitalized for treatment of post-diarrheal HUS. In the waning of the acute phase he presented a status epilepticus refractory to conventional antiepileptic drugs requiring the introduction of a prolonged barbiturate coma followed by a good recovery. After 4 weeks of evolution, the child has severe abdominal pain, stop bowel and vomiting. Ultrasound examinations were normal. The barium enema shows colonic tight stenosis at the splenic flexure. A transverse colectomy was then performed with immediate restoration of continuity. The postoperative course was uneventful.

The responsible agent for HUS is most often E. coli producing Shiga-toxin inducing ischemic microangiopathy giving major renal, neurological and abdominal complications. The latter occur most frequently in the acute phase of illness represented by intussusception, rectal prolapse, and colonic perforation. Late gastrointestinal complications such a perforation or colonic strictures are rare (1 and 3% respectively). Colonic stenosis predominates in the left colon. The time to onset was 1 month until 1 year. This diagnosis should be considered before abdominal pain or occlusive symptoms. Examination with radiological opacification is needed to confirm it. The treatment is surgical and consists of a colectomy with restoration of continuity possible despite the intestinal obstruction. Colonic stenosis should be considered before an intestinal obstruction occurring in the late follow-up of HUS.
46. — MECONIUM PERITONITIS: UNUSUAL CAUSE.
C.H.R. Citadelle, Liège, Belgium.

Pre-, per- and post-natal supports of an unusual etiology of meconium peritonitis.
Neonate born at 37 weeks 2/7; Apgar 1,6,8; distended abdomen, shiny but depressible.
Antenatally, a bowel hyperechogenicity is demonstrated with negative search for cystic fibrosis and viral infection.
At birth, the clinical and radiological findings confirmed non-calcified meconium peritonitis.
The intervention is performed the day after the birth: the meconium peritonitis depends on the perforation of a tubular transverse colon duplication. Dissection allowed excision of the transverse colon surrounded with this oblong mass.
Immediate restoration of continuity is performed because of the absence of meconium ileus and diameter disparity. The postoperative course was uneventful with extubation at day 1 and enteral feeding started at day 4.
Pathologic examination showed perforated tubular colonic duplication. The adjacent colon was normal (no sign of cystic fibrosis or Hirschsprung disease).
Meconium peritonitis is a rare entity most often associated with intestinal atresia or meconium ileus. Antenatal perforation of a transverse colonic duplication is very rarely described. This neonatal care in one time is possible with a newborn near the term end free of another digestive disease.

47. — IMPACT OF PRE-TRANSPLANT LIVER HEMODYNAMICS AND PORTAL RECONSTRUCTION TECHNIQUES ON POST-TRANSPLANT PORTAL VEIN COMPLICATIONS IN PAEDIATRIC LIVER TRANSPLANTATION: A RETROSPECTIVE ANALYSIS IN 197 RECIPIENTS.
C. de Magnée, Ch. Bourdeaux, F. De Dobbeleer, M. Janssen, R. Menten, Ph. Clapuyt, R. Reding.
Cliniques Universitaires St Luc, Louvain-en-Woluwe, Belgium.

Portal vein (PV) complications are the most frequent vascular complications in paediatric liver transplant (LT). We hypothesized that pre-LT liver hemodynamic parameters and PV reconstruction technique could predict the risk of PV complications post-LT.

Three hundred and seven children had a primary LT. A detailed ultrasound study of the pre-LT native liver hemodynamics was available in 198 cases, with details of PV anastomosis available for 197 of these: end-to-end anastomosis (n = 146, 74%), interposition vein graft technique (n = 28, 14%), or portoplasty (latero-lateral anastomosis of vein graft and recipient PV) (n = 23, 12%).

Overall 5-years patient survival rate was 90%. Among the 198 patients with pre-LT hemodynamic data, 79 (40%) had PV hypoplasia (diameter ≤ 4 mm), 64 (32%) had a pathological portal flow (non-hepatopetal flow), and 47 (24%) had an arterial resistance index (ARI) ≥ 1. Abnormal hemodynamics were mostly observed in biliary atresia (BA). Among these 3 parameters, only ARI ≥ 1 was significantly correlated with a higher rate of PV complications post-LT (p = 0.041). PV complication-free survival at 5 years were 91% for end-to-end anastomosis, 91% for portoplasty, and 62% for interposition vein graft technique (p = 0.002). At multivariate analysis, the use of an interposition vein graft was the only factor to be significantly associated with a higher rate of PV complications post-LT (p = 0.003).

PV hypoplasia with liver hemodynamic disturbances was mainly observed in BA. Hepatic ARI ≥ 1 might be a good predictor of PV complications post-LT. Latéro-lateral portoplasty seemed to provide the best results when end-to-end anastomosis is not feasible.
48. — DAY SURGERY CENTERS: QUALITY AND SAFETY IN SURGERY AND ORGANISATION.
G. Bogaert, P. Luysmans.

To err is human. However, human errors can be prevented in surgery. To reduce significantly or eliminate errors in surgical and non-surgical procedures, a standardization of processes is established. The standardization of processes results in safety and quality improvement. A well-known example and success of standardization of non-surgical processes is the aviation industry, where a zero tolerance for human errors is the goal. Quality and safety rules in (day) surgery are new, unusual terms that depend on each other. Quality and safety go together. It is for a surgeon unusual to be “ruled” by a standardization process to improve “his” care and a change of culture is needed. In the USA, hospitals receiving Medicare (insurance) patients “must” have a strict quality and safety ruled accreditation. The university hospital UZ Leuven has applied for and received the JCI (Joint Commission International) quality and safety accreditation. We will present and discuss the (old and new) quality and safety issues for (day) surgery.

Quality issues:
- Access and continuity to care
- Patient and family rights (e.g. informed consent, pain control)
- Patient and family education
- Surgical planning (preoperative waiting time,
- Post-surgical follow-up contact and evaluation
- Governance, leadership and direction
- Staff qualifications, evaluation and education
- Fire safety
- Continuous improvement of quality (e.g. report of adverse events)

Safety issues:
- Prevention and control of infections
- Anaesthesia and surgical care (e.g. time-out procedure, identification)
- Medication management use
- Management of communication and information

49. — QUALITY CARE IN SURGERY: CAN QUALITY INDICATORS BE THE CLUE? PROCARE PROJECT QUALITY INDICATORS.
W. Ceelen.
U.Z. Gent, Gent, Belgium.

Originally developed in the manufacturing industry, the concept of quality assurance has become a mantra for health-care administrators and practitioners alike. According to the Institute of Medicine, quality of care is ‘the degree to which health services increase the likelihood of desired health outcomes and are consistent with current professional knowledge’. In the context of cancer surgery, quality may be improved by the avoidance of error, by compliance with available evidence, by (re)training and credentialing/certification, and, importantly, by professional audit. The Project on Cancer of the Rectum (ProCare) is as a profession-driven, voluntary, multidisciplinary, national quality measurement initiative that allows regular feedback of selected quality of rectal cancer care indicators to the participating physicians. This feedback also allows individual physicians to position themselves against overall performance. Clearly, however, individual scores should be adjusted to the individual case mix to avoid unfair comparisons. For instance, by the process of risk adjustment, physicians who treat on the average older patients or more advanced cancers will not be penalized in terms of quality of care performance. The indications, methods, and preliminary results of the statistical methods to benchmark centres on a set of predefined quality indicators will be presented.
50. — CRITERIA OF EXCELLENCE IN BARIATRIC SURGERY: HOW TO IMPLEMENT IT IN BELGIUM.
L. Lemmens.
AZ Nikolaas, Sint-Niklaas, Belgium.

Surgery is now recognized as the only effective treatment for the morbidly obese patient with long-term sustained weight loss and postoperative complete resolution or significant improvement in the obesity comorbidities. However, this highly demanding and challenging surgical therapy necessitates the appropriate training and experience on the part of the surgeon. It is vital that the surgeon, beyond the optimal knowledge, also has the necessary technical skills in open and/or laparoscopic surgery, performs meticulous pre-and postoperative care and is committed to long-term patient follow-up. Moreover, institutional commitment to the excellent multidisciplinary care of the morbidly and super-obese patient, who has an exceptional surgical and anaesthetic risk, is essential to ensure the safe and effective performance of bariatric surgery. The necessary ancillary services, including specialized nursing staff, dieticians, psychologists, medical team of surgeons, cardiologists, anaesthesiologists, ICU specialists and psychiatrists, etc., may be extremely valuable. Modern medical and surgical facilities, such as operating room tables, instruments, furniture and radiology equipment capable of handling morbidly obese patients, are of course essential resources for any institution that seeks to treat bariatric patients. To achieve these criteria and to create centres of excellence “IFSO guidelines for Safety, Quality and Excellence in Bariatric Surgery” were accepted by IFSO and published in Obesity Surgery in 2007. In these guidelines the criteria are listed for medical institutions and surgeon’s credentials as well for primary bariatric institutions (who would like to start a bariatric center), for bariatric institutions (who would like to improve) and COEBI (Center of Excellence Bariatric Institution).

How to implement these criteria in Belgium?
As in the other surgical fields, the only tool we have at our disposal is the surgical society where we try to improve the knowledge of our colleagues by organizing symposia and workshops. Our bariatric society (BeSOMS) possesses a national register. We strongly suggest all the members to put in all their patients with follow-up. We have no power to implement the criteria, neither the register.
Since 2007 the Belgian government imposed Belgian Criteria concerning patient’s acceptance for bariatric surgery. One of these criteria is the existence of a register in the institute and every bariatric patient must be registered with follow-up. Our national register now has the possibility to use this as well as a local as a national register.
Will it later be possible to use this register to compare results and eventually impose criteria of Centres of Excellence (COE)?
International studies already exist to compare COE with other centres and high volume with low volume centres. Some studies show better results in high volume centres.

51. — QUALITY ASSURANCE IN BREAST SURGERY.
M. Vanhoey.
A.Z.-V.U.B., Brussel, Belgium.

In breast cancer surgery, decisions about type and timing of surgical and adjuvant treatment are becoming rather complex. Infinite possibilities exist and experience is needed to make the right decision for each patient. However, such important decisions should not be guided by experience alone. Evidence based decisions form the basis for good clinical practice. Quality measurements are invaluable in monitoring effectiveness of clinical practice. In order to measure quality, the recognition of valid, reliable, and usable quality indicators is necessary. Several quality indicators for breast cancer surgery have been identified: re-intervention proportion, breast conservative therapy-proportion, sentinel lymph node biopsy-proportion, lymph node-yield of axillary clearance. Should the systematic registration of these indicators be added to the requirements for breast clinic recognition or only used to help define national, international guidelines?
Growing demand for health care, rising costs, constrained resources, and evidence of variations in clinical practice have triggered interest in measuring and improving the quality of health care in many countries. For a comprehensive quality assessment, relevant data must be obtained in a standardized, reproducible manner allowing comparison among different centres and therapies and within a centre over time. The assessment of both the patients’ risk and the postoperative outcome are cornerstones of quality measurement in surgery. However, the lack of consensus on how to define and grade negative postoperative events has greatly hampered the evaluation of surgical quality. Furthermore, it is still unclear by whom and how complications should be best recorded; the reliability of databases assessing surgical complications is widely elusive. In our centre, quality assessment is based on the recording of preoperative risk factors of each patient to adjust for the case-mix and a well established grading system to track complications. This simple and reproducible classification of complications, published in 2004, is based on the therapy needed to correct the complication. We recently evaluated the reliability of our quality database that administrated by residents and critically assess this classification for further use from the perspective of the literature, complex cases, and perception by patients and health care providers. To evaluate the validity of the recorded data, we audited our prospective quality database over a 6-month period. In the first 3 months, the audit was done in an undisclosed manner. Then, the audit was disclosed to the residents who were again subjected to a teaching course. Thereafter, the audit was continued in a disclosed manner for another 3 months, and data were compared between the two periods. Furthermore, we inquired about the strategies to assess surgical quality in 108 European medical centres. Next, the literature using our classification system was systematically analyzed. In addition, 11 difficult case scenarios were prepared to develop a consensus on how to rank the various complications. Third, seven centres from different continents, having routinely used the classification, independently assessed the eleven scenarios. An agreement analysis was performed to test the accuracy of the classification. Finally, the perception of the severity was tested in patients, nurses and physicians by presenting 30 scenarios, each illustrating a specific grade of complication.

Surprisingly, our residents failed to report most complications; 80% (164/206) and 79% (275/347; p = 0.27) of the negative postoperative events were not recorded during the first and the second period of the audit, respectively. When captured, however, grading of complications was correct in 97% of the cases. Moreover, co-morbidities were incorrectly assessed in 20% of the patients in the first period and in 14% thereafter (p = 0.07). The survey disclosed that residents and junior staff are responsible of recording surgical outcome in 80% of the centres throughout Europe. The review of the literature further revealed a dramatic increase in the use of classification in many fields of surgery. The study of 11 difficult cases among various centres showed a high degree of agreement in identifying and ranking complications (90% agreement). Each grade of complications significantly correlated with the perception by patients, nurses, and physicians (p < 0.005).

Quality assessment in surgery is paramount for patients and health care providers. However, recording of outcome by surgical residents is unreliable, despite active and focused training. Hence, surgery should be evaluated solely by dedicated personnel. The complication classification as introduced in 2004, however, proofed to be simple and reproducible. The 5-year evaluation further provided strong evidence that the classification is valid and applicable worldwide in many fields of surgery.
53. — CHOLECYSTECTOMY FOR ASYMPTOMATIC GALLBLADDER STONES: WHEN?
J-L. Jourdan.
Liège, Belgium.

As many as 7 to 15% of the population may bear gallbladder stones. With aging population and better means of diagnosis the prevalence of cholelithiasis is likely to increase furthermore. At the time of finding more than 70% of incidental gallstones are silent. For the vast majority, they will remain asymptomatic or never will lead to complication. Based on the natural history of asymptomatic gallbladder stones, whether or not it is advisable to perform cholecystectomy in these patients is often a matter of debate. Is laparoscopy or other minimal invasive techniques affecting the equation?
Moreover are there subsets of patients or particular situations where such a procedure should or should not be recommended? Attempts of predicting which patients may become symptomatic are expected to find the ones who will benefit from the procedure. Or else being safe does not suffice for preventive surgery in this setting?

56. — NOTES FOR BILIARY SURGERY: WHERE ARE WE IN 2011?
K. S. Lehmann.
Berlin, Germany.

The German NOTES registry (GNR) currently is the largest database for natural orifice transluminal endoscopic surgery (NOTES) worldwide. We herein report the results three years after implementation. The GNR is a voluntary and anonymous online database with real-time benchmarking. Database entries from March 2008 to February 2011 were analyzed with regard to demographics, intra-operative and postoperative data. A multivariate analysis was performed for outcome parameters.
Eighty seven centres participated in the GNR. One thousand five hundred and forty five procedures were entered (314 in 2008, 557 in 2009, 674 in 2010). One thousand three hundred and ninety two cholecystectomies, 86 appendectomies, 49 colectomies and 18 other operations were recorded. One thousand five hundred and forty two (99.8%) patients were female. One thousand five hundred procedures were performed in transvaginal hybrid technique with 1.2+/-0.5 additional umbilical trocars in cholecystectomies and 2.9+/-1.1 additional trocars in colectomies. Nine patients (6m, 3f) received a transgastric appendectomy in flexible technique with one additional umbilical trocar each. Case volume was analyzed for high-volume (n = 14, mean 88 procedures) and low-volume centers (mean 8.9 procedures). High-volume centres showed a shorter operation length in the multivariate analysis (57.0 +/- 25.1 min vs. 76.6 +/- 25.2 min, estimate -0.212, P = < 0.001), but case volume had no impact on complications (3.9% vs. 4.9%, OR 0.999, P = 0.645) or conversions (2.7% vs. 2.3%, OR 0.996, P = 0.219).
The combination of transvaginal access with laparoscopy is an established hybrid technique in certain high-volume centres. The frequency of NOTES procedures in Germany is rising, but still marginal compared to conventional techniques. Pure NOTES with flexible instruments is limited to a few cases. Currently, NOTES is an interesting surgical technique, but has minimal clinical impact.
57. — NEW STAGING CLASSIFICATION FOR HILAR CHOLANGIOCARCINOMA.
M. De Oliveira, M. Lesurtel, P. A. Clavien.
University Hospital, Zurich, Switzerland.

Perihilar cholangiocarcinoma (PHC) remains a challenging and controversial disease. The major barrier to compare results among centres and identify the best therapies according the type and extend of the disease is the lack of a reliable staging system. Bismuth-Corlette classification is widely used, but it does not include critical data about vascular encasement and distant metastases. Other systems are restricted to centre’s experience and do not provide enough information for guiding therapy, including liver transplantation (LT).

The aim is to introduce a new terminology and classification system to gather large scale data through an international registry. The long-term goal is to develop a relevant staging system guiding therapy including surgery and LT.

We critically reviewed all available staging systems and designed a novel and simple classification system for PHC based on tumour type and size, extension along the biliary system, vascular and lymph nodes involvement, also considering putative remnant liver volume after resection, underlying liver disease, as well as assessment for LT. A new registry was made available to gather data from all around the world (www.cholangioca.org).

The use of common terminology and classification system for PHC, made available in a worldwide registry, offers a new tool to gather relevant data to enable comparison among centres and the identification of best therapies based on objective and reproducible information.

58. — MANAGEMENT OF COMMON BILE DUCT STONES DURING LAPAROSCOPIC CHOLECYSTECTOMY.
B. Topal.

The prevalence of cholecystolithiasis (CCL) in European studies ranges between 5.9% and 21.9%. About 15% of individuals with CCL will develop common bile duct stones (CBDS). Although CBDS may remain asymptomatic, complications such as cholangitis or pancreatitis can cause major morbidity and mortality. Managing common bile duct stones (CBDS) in patients who need to undergo cholecystectomy is controversial. Today, therapeutic decision-making is based on the local availability of expertise. Treatment options include (2-stage procedure) pre- or postoperative endoscopic retrograde cholangiopancreatography with endoscopic retrograde sphincterotomy (ERCP/ERS) or surgical bile duct clearance and cholecystectomy at the same time (1-stage procedure). With increasing experience in laparoscopic common bile duct exploration (LCBDE) a 1-stage management of patients with CBDS and gallbladder stones is emerging. Although the 1-stage management is associated with a shorter hospital stay and with lower hospital costs, it is not widely accepted and still underused. Laparoscopic CBDE with stone extraction can be performed with high efficiency, minimal morbidity and without mortality. A trans-cystic approach is feasible in most patients, whereas choledochotomy should be restricted to large bile duct stones that cannot be extracted through the cystic duct. The current presentation will highlight the state of the art 1-stage management of CDBS and its associated success rate even in an ambulatory setting, its technical aspects, morbidity and cost-effectiveness.
59. — BILE DUCT INJURY : HOW TO GET OUT OF THIS MESS?
V. Lucidi.
Hôpital Erasme, Bruxelles, Belgium.

Bile duct injury (BDI) during cholecystectomy procedure is a serious complication of the most commonly performed elective abdominal surgical procedure in western countries. Since the advent of laparoscopy the overall rate of BDI has significantly risen from approximately 0.3 to 1.2% and moreover the proportion of severe injuries has doubled from 30 to 60% for Bismuth type 3 & 4 strictures.
The management of BDI to be undertaken depends on moment of diagnosis, 44% being diagnosed intra-operatively, on type of surgical presentation in case of postoperative diagnosis, on type of injury (Bismuth or Strassberg classifications), on associated vascular lesions and finally on the experience of the surgical team.
An appropriate initial management of BDI is extremely important as from inefficient initial bile duct repair rises the complexity and success of further repairs, and that it has a negative impact on long-term survival of patients.
Different practical clinical scenarios are discussed to elucidate and try to advise the attitude to have when faced to those stressful situations.

60. — INCIDENTAL FINDING OF GALLBLADDER CANCER. WHAT TO DO?
C. Hubert, B. Navez, J. F. Gigot.
Cliniques Universitaires St. Luc, Louvain-en-Woluwe, Belgium.

Gallbladder cancer is rare in Europe compared to Asia and South and Central America. Gallbladder carcinoma (GBC) carries a bad prognosis cancer, associated with an overall 5-year survival rate less than 5%-10% due to late diagnosis.
With the increasingly widespread acceptance of laparoscopic cholecystectomy (LC), the number of case of incidental GBC has increased. The majority of cases of incidental GBC are at early TNM stage (80% of stage I or II). Excellent 5-year survival rate has been reported for stage I-A disease and the survival has significantly improved for Stage I-B II, and III if appropriate radical operation is carried out soon after incidental detection of gallbladder cancer. GBC should be suspected in patient older than 70 years old with thickened gallbladder wall (cholecystitis) and a long past history of gallstones. Management of incidental GBC is a difficult issue in the absence of clear-cut established guidelines. The treatment should be tailored to cancer stage. For stage Tis or T1-A tumors, LC is sufficient. Patients with T1-B tumors should undergo routine liver resection (gallbladder bed) with lymphadenectomy. Even when incidental GBC is diagnosed post-operatively on pathological examination of the specimen, adequate additional surgery should be performed to improve the prognosis.
The aim of an intra-operative evaluation of the common bile duct during cholecystectomy is double: firstly to detect a common bile duct stone (CBDs) found in 5-10 percent of cholecystectomies, secondly to identify the biliary anatomy and avoid a common bile duct injury (CBDI).

Intra-operative cholangiography (IOC) is the standard technique. The tricks, benefits, risks, pitfalls of this well-known technique will be recalled.

The success rate of this technique isn't however 100 per cent. Rates from 85 to 97% have been described. The laparoscopic ultrasonography (LUS) of the biliary tract has emerged as an alternative to the IOC. A review of the literature demonstrated that the success rate of bile duct visualisation varies between 95 and 100%. LUS, however, has its own drawbacks and could be difficult to realize in a few situations, especially in case of heavy liver steatosis. LUS is at least as efficient as IOS in the detection of CBDs, and could give additional information by detecting un-organised material in the bile ducts (sludge). In terms of prevention of CBDI, we don't find results with very large series, but there was certainly not a larger rate of CBDI in the published results. Instead, LUS can sometimes demonstrate the CBD before any dissection in difficult inflammatory cases.

LUS has too the advantage to be less time-consuming than cholangiography, to prevent any radiation of the medical staff and presents absolutely no risk of bile duct injury potentially existing with the insertion of a transcystic tube in IOC.

The LUS technique used by the author will be demonstrated.

Next to IOS and LUS, a new technique has been described recently, the fluorescent cholangiography. This technique is based on the biliary excretion of indocyanin green (ICG) which is fluorescent when illuminated with near infra-red light. The main advantage of the technique is to permit to obtain fluorescent images of the biliary tract at any time during the procedure.

Despite the great performance of the intra-operative imaging, its use is still limited in daily practice. This is probably the main debate around intra-operative imaging especially regarding CBDI. Those supporting IOC will argue that it could diminish the rate of CBDI or at least the rate of un-diagnosed cases during the procedure, which is an important prognostic factor of CBDI. However, a recent questionnaire (2011) about the safety measures during cholecystectomy among the members of the Dutch Society of Surgery demonstrated that «53.2% never perform intra-operative cholangiography (IOC), 41.3% perform it incidentally, and only 2.6% perform it routinely».

A large database from Switzerland revealed a constant rate of CBDI between 1995 and 2005 despite a decreased use of IOC from 37.1 to 30.1 per cent.

In conclusion:

Intra-operative imaging is highly performant in CBD identification. LUS could be at least as efficient as IOC with a few advantages. Imaging permits the diagnosis of CBDs and prevents cases of CBDI. Despite this, the indication of its use is still controversial and recent reports demonstrated that it is certainly not systematically used, without any evident negative impact. This is an argument in favour of the essential role of dissection quality.

However, IOC and LUS must remain important tools in the hands of surgeons. So, any general or HPB surgeon would still be trained to use them.
64. — BASIC KNOWLEDGE ON GIST TUMOURS.
M. Debiec-Rychter.

Gastrointestinal stromal tumours (GISTs) represent a mesenchymal neoplasm occurring primarily in the gastrointestinal tract, and showing differentiation toward the interstitial cell of Cajal. Its incidence is approximately 15 cases/100,000/year. Stomach and small bowel are the most frequently affected anatomic sites. GIST represents a morphological, immunophenotypical and molecular distinct entity, the recognition of which has profound therapeutic implications. The understanding of GIST biology has made this tumour a paradigm for molecularly targeted therapy in solid tumours. Approximately 85% of GISTs harbour activating mutations in \( \text{KIT} \) or the homologous receptor tyrosine kinase \( \text{PDGFR\_A} \) gene. These mutations are an early event in GIST development and the oncoproteins serve as a target for the small molecule tyrosine kinase inhibitors (TKI), imatinib and sunitinib. \( \text{KIT} \) or \( \text{PDGFR\_A} \) mutational status of the tumour is one of the strongest predictors of response to both drugs. Patients with \( \text{KIT} \) exon 11 mutant GIST have better response rates, PFS, and overall survival compared to other mutations. Median survival for patients with metastatic GIST improved from 19 to 60 months with imatinib. However, the emerging problem in management of GIST is resistance to imatinib, with two recognized clinical patterns: 1) early resistance concerns ~10-14% of patients that progress within 3 months of starting imatinib, 2) patients with later progression are classified as having secondary or acquired resistance. Median progression-free survival (PFS) on imatinib is approximately 24 months. Primary studies and a meta-analysis of studies of imatinib in GIST patients have identified prognostic features that contribute to treatment failure. Patients intolerant to imatinib (5%) and those who progress on imatinib are treated with sunitinib. The main mechanism of resistance to imatinib and sunitinib is related to growth of clones with secondary mutations in \( \text{KIT} \). Other TKIs studied in clinical trials for GIST include a wide range of different agents, such as sorafenib, dasatinib, pazopanib, regorafenib, masitinib, and nilotinib.