



ISRAEL SURGICAL ASSOCIATION

**JOINT MEETING OF THE
ISRAEL SOCIETY OF COLON AND RECTAL SURGERY
AND THE ISRAELI SOCIETY OF ENDOSCOPIC SURGERY**

Eilat, Israel, December 16-18, 2004

PROGRAM

as at December 9, 2004

ORGANIZING COMMITTEE

A.A. Deutsch, Honorary, Conference President

P. Reissman, Conference Co-Chair, Israeli Society of Endoscopic Surgery

Y. Ziv, Chairperson, Israel Society of Colon and Rectal Surgery and Conference Co-Chair

D. Neufeld, Sapir Medical Center, Meir General Hospital, Kfar Sava

A. Rosen, Edith Wolfson Medical Center, Holon

B. Shpitz, Sapir Medical Center, Meir General Hospital, Kfar Sava

A. Szold, Chairperson, Israel Society of Endoscopic Surgery

R. Weil, Hasharon Hospital, Golda Campus, Rabin Medical Center, Petach Tikva

SCIENTIFIC COMMITTEE

D. Duek, Rambam Medical Center, Haifa

P. Reissman, Shaare Zedek Medical Center, Jerusalem

H. Tulchinsky, Tel Aviv Sourasky Medical Center, Tel Aviv

S. Walfisch, Soroka Medical Center, Beer Sheva

O. Zmora, Chaim Sheba Medical Center, Tel Hashomer

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GENERAL INFORMATION

VENUE

Princess Hotel, Eilat
Tel: +972 8 6365555, Fax: +972 8 6379738

LANGUAGE

The Conference will be conducted in English.

REGISTRATION/HOSPITALITY/INFORMATION

Registration and Hospitality Desks will operate as follows, in the area of the exhibition, next to the Eilat Hall (Floor -2):

Thursday, December 16, 2004 during session times (11:30 – 19:00)
Friday, December 17, 2004 during session times (08:00 – 14:00)

CHECK IN/CHECK OUT

Check-in at the hotel on Wednesday and Thursday is at 15:00.
The hotel will endeavor to provide rooms upon your arrival.
Check-out is at the end of Sabbath (early Saturday evening), or at noon on other days of the week.

CONFERENCE FOLDER AND NAME BADGE

Your name badge is included in the conference folder, which you will receive upon registration.
Please wear your badge to all conference sessions and events.
The folder will also include a CD with all the conference abstracts.

PROJECTION

A laptop computer will be available on the podium and all presentations will be projected from this computer. Please contact one of the technicians during the session break before your scheduled presentation in order to download your presentation onto the computer to avoid any delay.

POSTERS

Kindly check the program for your poster board number. Please use only the poster board with the number as assigned in the book.
Please note that the organizers cannot be held responsible for posters that are not removed by 14:00 on Friday, December 17, 2004.

EXHIBITION

A commercial exhibition will be held within the framework of the meeting.

SOCIAL PROGRAM

Award Ceremony

On Thursday evening following dinner starting at 20:30 in the Eilat Hall, we will honor two of our members with a life achievement award during a special Award Ceremony. There will also be an award for the most outstanding work presented.

Please Note: Those who wish to eat earlier, may do so in the Hotel Dining Room, but are required to inform the Hospitality Desk by 16:00 on Thursday.

Dolphin Reef

For those who pre-booked this event, please meet in the lobby on Friday afternoon, at 14:45. Buses will be available to take participants to the Dolphin Reef. Please be prompt.

Please Note: Those who wish to participate must notify the Hospitality Desk by 10:00 on Friday morning so as to receive the necessary voucher.

Entertainment

On Friday evening at 21:00, the Moran Singers will perform in the Eilat Hall; Conductor Naomi Paran.

GENERAL INFORMATION (cont.)

TRAVEL AND ACCOMMODATION

Target Conferences, the official conference travel agent, will be happy to assist participants requiring additional hotel accommodation, tours, car rentals, domestic flights, transfers etc.

Please contact us at the hospitality desk.

Payment for any of these services can be made in travelers' checks, foreign currency or via major credit cards.

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PROGRAM

THURSDAY, DECEMBER 16, 2004

12:00 Registration, Light Lunch, Poster Viewing and Visit the Exhibition



14:00 - 14:10 **Opening Session** **Massada Hall**

14:00 OPENING REMARKS
A.A. Deutsch, Honorary Conference President
J.M. Klausner, Chairperson, Israel Surgical Association
Y. Ziv, Chairperson, Israel Society of Colon and Rectal Surgery and
Conference Co-Chair
P. Reissman, Conference Co-Chair, Israeli Society of Endoscopic Surgery
A. Szold, Chairperson, Israel Society of Endoscopic Surgery

14:10 - 15:00 **Session 1** **Massada Hall**

Moderators: **P. Reissman**, Shaare Zedek Medical
Center, Jerusalem
Z. Gimmon, Hadassah Medical Center, Ein Karem, Jerusalem

14:10 LAPAROSCOPIC SURGERY FOR COMPLICATED CROHN'S DISEASE
B. Salky, Dept. of Surgery, Mount Sinai Medical Center, New York, USA

14:35 ADVANCES IN THE SYSTEMIC TREATMENT OF
COLORECTAL CANCER
D.P. Kelsen, Gastrointestinal Oncology Service, Memorial
Sloan-Kettering Cancer Center, New York, USA

15:00 - 16:30 **Session 2** **Massada Hall**

LAPAROSCOPIC SURGERY FOR COLORECTAL CARCINOMA

Moderator: **Y. Ziv**, Assaf Harofeh Medical Center, Zerifin

15:00 PRO
A. Ayalon, Dept. of Surgery B, Chaim Sheba Medical Center,
Tel Hashomer

15:15 CON
H.R. Freund, Dept. of Surgery, Hadassah University Hospital -
Mount Scopus, Jerusalem

15:30 LAPAROSCOPIC SURGERY FOR COLORECTAL CANCER –
UPDATE OF PROSPECTIVE STUDIES
O. Zmora, Dept. of Surgery, Chaim Sheba Medical Center, Tel
Hashomer

15:45 COMPLICATIONS OF LAPAROSCOPIC SURGERY FOR
COLORECTAL CARCINOMA

B. Shpitz, Dept. of Surgery B, Sapir Medical Center, Meir General Hospital,
Kfar Sava

THURSDAY, DECEMBER 16, 2004 (cont.)

16:00 PANEL DISCUSSION

Moderator: **Y. Ziv**, Assaf Harofeh Medical Center, Zerifin

Members: **D.P. Kelsen**, Memorial Sloan-Kettering Cancer Center, New York, USA
B. Salky, Mount Sinai Medical Center, New York, USA
A. Ayalon, Chaim Sheba Medical Center, Tel Hashomer
H.R. Freund, Hadassah University Hospital – Mount Scopus, Jerusalem
P. Reissman, Shaare Zedek Medical Center, Jerusalem
B. Shpitz, Sapir Medical Center, Meir General Hospital, Kfar Sava
O. Zmora, Chaim Sheba Medical Center, Tel Hashomer

16:30 Coffee Break, Poster Viewing and Visit the Exhibition



17:00 – 17:40

Session 3

Massada Hall

FREE PAPERS

Moderators: **J. Koriensky**, Sheba Medical Center, Tel Hashomer
M.M. Krausz, Rambam Medical Center, Haifa

17:00 ASSESSING THE LEARNING CURVE FOR LAPAROSCOPIC COLORECTAL SURGERY - LESSONS LEARNED FROM OUR FIRST FORTY PATIENTS

H. Hermon, R. Greenberg, E. Karin, Y. Sobol, E. Neshet, M. Shimcha,

O. Kaplan, Y. Skornick, S. Avital
Dept. of Surgery A, Tel Aviv Sourasky Medical Center and Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv

17:10 LAPAROSCOPIC RIGHT HEMICOLECTOMY - SHOULD THE ANASTOMOSIS BE DONE INTRA OR EXTRA-CORPOREALLY?

G. Sroka, S. Eldar, T. Kopelman, H. Mady, I. Matter
Dept. of General Surgery, Laparoscopic Surgery Unit, Bnai Zion Medical Center, Haifa

17:20 LAPAROSCOPIC ASSISTED RESECTION FOR COMPLICATED CROHN'S DISEASE

Y. Armon, R.M. Spira, V. Avidan, A. Vainstein, O. Zmora, D. Odeneimer, P. Reissman
Dept. of Surgery, Shaare Zedek Medical Center, Jerusalem

- 17:30 LOW INCIDENCE OF ADHESION ILEUS AFTER LAPAROSCOPIC COLORECTAL SURGERY
D. Rosin, O. Zmora, A. Hoffman, M. Khaikin, B. Bar Zakai, Y. Munz, M. Shabtai, A. Ayalon
 Dept. of General Surgery and Transplantation, Chaim Sheba Medical Center, Tel Hashomer, Sackler School of Medicine, Tel Aviv University, Tel Aviv

THURSDAY, DECEMBER 16, 2004 (cont.)

17:40 - 18:20	Session 4	Massada Hall
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FREE PAPERS

Moderators: **A. Halevy**, Assaf Harofeh Medical Center, Zerifin
 J. Sayfan, HaEmek Medical Center, Afula

- 17:40 306 LAPAROSCOPIC COLORECTAL PROCEDURES: SHORT-TERM AND ONCOLOGICAL LONG-TERM RESULTS
D. Rosin, O. Zmora, A. Hoffman, M. Khaikin, B. Bar Zakai, Y. Munz, M. Shabtai, A. Ayalon
 Dept. of General Surgery and Transplantation, Chaim Sheba Medical Center, Tel Hashomer, Sackler School of Medicine, Tel Aviv University, Tel Aviv
- 17:50 THE LEARNING CURVE IN LAPAROSCOPIC COLECTOMIES: RESULTS AND CONSIDERATIONS
N. Slijper, S. Eldar, H. Madi, T. Koppelman, I. Matter
 Dept. of Surgery, Bnai Zion Medical Center, Haifa
- 18:00 LAPAROSCOPIC-ASSISTED REVERSAL OF HARTMANN'S PROCEDURE: TECHNICALLY CHALLENGING BUT WITH CLEAR ADVANTAGES TO PATIENTS
M. Khaikin, Y. Munz, D. Rosin, O. Zmora, M. Shabtai, A. Ayalon
 Dept. of General Surgery and Transplantation, Chaim Sheba Medical Center, Tel Hashomer, and Sackler School of Medicine, Tel Aviv University, Tel Aviv
- 18:10 Wrap-up

THURSDAY, DECEMBER 16, 2004 (cont.)

18:20 - 19:00

Session 5

Massada Hall

In Memory of Prof. Reuven Pfeffermann and Dr. Oded Cohen

PRESENTATION OF SELECTED FREE PAPERS

Moderators: **A. Szold**, Tel Aviv Sourasky Medical Center,
Tel Aviv **S. Walfisch**, Soroka Medical Center,
Beer Sheva

- 18:20 CONVERTED LAPAROSCOPIC COLON RESECTION; WHAT IS THE TRUE MORBIDITY?
A. Belizon, T.C. Sardinha, M.E. Sher
North Shore-Long Island Jewish Medical Center, New Hyde Park, NY, USA
- 18:30 A PROSPECTIVE STUDY COMPARING HAND-ASSISTED LAPAROSCOPIC COLECTOMY WITH OPEN COLECTOMY
O. Avrutis, J. Meshoulam, O. Sibirsky, V. Michalevsky, A. Durst
Dept. of Surgery, Bikur Cholim Hospital, Jerusalem
- 18:40 GRACILIS MUSCLE TRANSPOSITION FOR FISTULAS BETWEEN THE RECTUM AND URETHRA OR VAGINA
O. Zmora, H. Tulchinsky, E. Gur*, G. Goldman, M. Rabau
Colorectal Unit, Division of Surgery B, *Dept. of Plastic Surgery, Tel Aviv Sourasky Medical Center, Tel Aviv
- 18:50 LAPAROSCOPIC REPAIR OF BILATERAL AND RECURRENT INGUINAL HERNIAS
B. Kirshtein, L. Lantsberg, E. Avinoah, S. Mizrahi
Dept. of Surgery "A", Soroka Medical Center, Ben Gurion University of the Negev, Beer Sheva

19:00

VIDEO CONFERENCE

Massada Hall

- 19:00 META-ANALYSIS OF RANDOMIZED CONTROLLED STUDIES ON LAPAROSCOPIC SURGERY FOR COLONIC CANCER
J. Bonjer, Rotterdam (presently in Canada)
Sponsored by Ethicon Endo-Surgery

19:30 Cocktail Reception in Exhibition Area and Poster Viewing

20:30 Dinner in Eilat Hall with musical background

AWARD CEREMONY
Moderator: **A.A. Deutsch**, Honorary Conference President

Life-time Achievement Awards
M.M. Feuchtwanger
A. Durst

Best Paper Award



FRIDAY, DECEMBER 17, 2004

08:30 - 09:30	Session 6	Massada Hall
	Moderators: M. Rabau , Tel Aviv Sourasky Medical Center, Tel Aviv L. Lantsberg , Soroka Medical Center, Beer Sheva	
08:30	COLORECTAL CANCER IN ISRAEL - GENETIC BACKGROUND AND POTENTIAL FOR PREVENTION G. Rennert , CHS National Cancer Control Center at Carmel Medical Center and B. Rappaport Faculty of Medicine, Technion Haifa, Israel	
09:00	ADVANCED LAPAROSCOPIC FOREGUT SURGERY B. Salky , Dept. of Surgery, Mount Sinai Medical Center, New York, USA	

09:30 - 10:30	Parallel Session 7 - A	Eilat Hall
	COLON AND RECTAL SURGERY - COLORECTAL CANCER Moderators: Z. Dreznik , Hasharon Hospital, Golda Campus, Rabin Medical Center, Petach Tikva D. Neufeld , Sapir Medical Center, Meir General Hospital, Kfar Sava	
09:30	THE IMPACT OF NEO-ADJUVANT TREATMENT ON THE ACCURACY OF FDG PET-CT IN PATIENTS WITH COLORECTAL METASTASES TO THE LIVER: COMPARISON WITH OPERATIVE AND PATHOLOGICAL FINDINGS N. Lubezky ¹ , E. Even-Sapir ² , R. Nakache ¹ , E. Barazovsky ³ , E. Shmueli ⁴ , A. Figer ⁴ , J.M. Klausner ¹ , M. Ben-Haim ¹ Depts. of Surgery ¹ , Nuclear Medicine ² , Pathology ³ and Oncology ³ , Tel Aviv Sourasky Medical Center, Tel Aviv	
09:40	THE UBIQUITIN LIGASE SUBUNITS SKP2 AND CKS1 ARE NOVEL INDEPENDENT PROGNOSTIC MARKERS FOR SURVIVAL IN COLORECTAL CANCER D. Hershko , O. Ben-Izhak, S. Linn, B. Bishara, M. Krausz, I. Minkov, M. Shapira Depts. of Surgery A and Pathology and Unit of Clinical Epidemiology, Rambam Medical Center, Haifa	
09:50	SENTINEL LYMPH NODE (SLN) IN COLORECTAL CANCER Y. Ziv , M. Herbert, J. Sandbank, R. Gold, M. Negri, Z. Halpern, I. Wasserman, A. Halevy Division of Surgery, Pathology Institute, Assaf Harofeh Medical Center, Zerifin	
10:00	PROLONGATION OF THE INTERVAL BETWEEN PREOPERATIVE CHEMORADIATION AND RECTAL	

CANCER SURGERY: THE EFFECT ON MORBIDITY AND
PATHOLOGIC COMPLETE RESPONSE

H. Tulchinsky¹, E. Shemueli², A. Figer², G. Goldman¹, M. Rabau¹
¹Proctology Unit, Dept. of Surgery "B", ²Dept. of Oncology, Tel
Aviv Sourasky Medical Center, Tel Aviv

FRIDAY, DECEMBER 17, 2004 (cont.)

Parallel Session 7 - A (cont.)

- 10:10 PLASMA PROLACTIN AND ITS TISSUE RECEPTOR IN COLORECTAL CARCINOMA - ITS ROLE AS TUMOR MARKER, THE POSSIBLE PATHOGENESIS AND ITS IMPLICATION ON TREATMENT
O. Sibirsky¹, Y. Ilan², V. Barak³, O. Gofrit¹, R. Neshet⁴, N. Livni⁵, A. Durst¹, E. Goldin
Depts. of Surgery¹, Gastroenterology², Tumor Marker Laboratory³, Endocrinology⁴, Pathology⁵, Hadassah Medical Center, Ein Karem, Jerusalem
- 10:20 Wrap-up
- 10:30 Coffee Break, Poster Viewing and Visit the Exhibition



09:30 - 10:30

Parallel Session 7 - B

Massada Hall

ENDOSCOPIC SURGERY - GI AND BILIARY

Moderators: **I. Matter**, Bnai Zion Medical Center, Haifa

S. Abu-Abaid, Tel Aviv Sourasky Medical Center, Tel Aviv

- 09:30 PROSPECTIVE EVALUATION OF LAPAROSCOPIC CHOLECYSTECTOMY AFTER PERCUTANEOUS CHOLECYSTOSTOMY
H. Paran¹, R. Zissin², **E. Rosenberg**¹, I. Griton², E. Kots², M. Gutman¹
Depts. of Surgery "A"¹ and Radiology², Meir Medical Center, Kfar Sava, and Tel Aviv University School of Medicine, Tel Aviv
- 09:40 THE MANAGEMENT OF IATROGENIC BILE DUCT INJURY DURING LAPAROSCOPIC CHOLECYSTECTOMY
A. Rosen, M. Shimonov, P. Schachter, J. Avni*, D.J. Behar**, **A. Czerniak**
Depts. of Surgery "A", Gastrology*and Radiology**, Edith Wolfson Medical Center, Holon, and Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv
- 09:50 KYPHOSCOLIOSIS AND PARAESOPHAGEAL HERNIA
B. Sagie, A. Blachar, A. Szold
Endoscopic Surgery Service, Dept. of Surgery B and Dept. of Radiology, Tel Aviv Sourasky Medical Center, Tel Aviv
- 10:00 OUTCOME ANALYSIS OF LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS FOR MORBID OBESITY
D. Goitein, J. Urbandt, P. Papasavas, D. Gagne, P. Caushaj
Temple University, Clinical Campus at The Western Pennsylvania Hospital, Pittsburgh, PA, USA
- 10:10 THE TRANSITION INTO THE LAPAROSCOPIC ERA
A. Ayalon, D. Rosin, E.L. Shabtai, B. Bar-Zakai, M. Khaikin, Y. Munz, M. Shabtai
Dept. of Surgery B, Chaim Sheba Medical Center and Statistical Service,
Tel Hashomer, Tel Aviv Sourasky Medical Center, and Sackler School of Medicine, Tel Aviv University, Tel Aviv
- 10:20 Wrap-up



10:30 Coffee Break, Poster Viewing and Visit the Exhibition

FRIDAY, DECEMBER 17, 2004 (cont.)

11:00 - 11:45

Session 8 - Round table

Massada Hall

VIRTUAL COLONOSCOPY

Moderator: **R. Weil**, Hasharon Hospital, Golda Campus,
Rabin Medical Center, Petach
Tikva

**NEW TECHNOLOGIES AND ADVANTAGES OF VIRTUAL
COLONOSCOPY**

11:00 **ADVANTAGES:**
Y. Bar-Ziv, Mor Institute, Ramat Gan

11:20 **DISADVANTAGES**
R. Eliakim, Rambam Medical Center, Haifa

11:30 Discussion

Participants: **G. Rennert**, Carmel Medical Center, Haifa
Y. Bar-Ziv, Mor Institute,
Ramat Gan
R. Eliakim, Rambam Medical
Center, Haifa
Y. Ziv, Assaf Harofeh Medical
Center, Zerifin
R. Weil, Hasharon
Hospital, Golda Campus,
Rabin Medical Center, Petach
Tikva

11:45 - 12:30

Parallel Session 9 - A

Eilat Hall

COLON AND RECTAL SURGERY - MISCELLANEOUS

Moderators: **H. Tulchinsky**, Tel Aviv Sourasky Medical Center, Tel Aviv
D. Duek, Rambam Medical Center, Haifa

- 11:45 NITI HANDCAC PERFORMANCE IN COLONIC COMPRESSION ANASTOMOSIS
S. Lelcuk¹, I. Nudelman¹, V. Fuko¹, F. Greif¹, D. Kopelman², A. Szold¹
¹Rabin Medical Center, ²HaEmek Medical Center, ³Tel Aviv Medical Center, Tel Aviv
Sponsored by NiTi Medical Technologies Ltd.
- 11:55 THE USE OF MRI FOR STAGING OF RECTAL CARCINOMA
G. Tolstov¹, S. Apter², Y. Ziv¹, A. Halvy¹, Y. Itzchak²
Division of Surgery¹, Assaf Harofeh Medical Center, Zrifin, and Division of Radiology², Chaim Sheba Medical Center, Tel Hashomer and Sackler School of Medicine, Tel Aviv University, Tel Aviv
- 12:05 PSYCHOPATHOLOGY AND QUALITY OF LIFE AMONG PATIENTS WITH CHRONIC IDIOPATHIC CONSTIPATION: A COMPARISON TO HEALTHY CONTROLS
Y. Ron¹, E. Bodner², O. Shevach¹, E. Lukovetsky¹, Y. Avni¹,
¹Dept. of Gastroenterology, Edith Wolfson Medical Center, Holon, and Sackler School of Medicine, Tel Aviv University, Tel Aviv, ²Dept. of Interdisciplinary Social Sciences, Bar Ilan University, Ramat Gan
- 12:15 ENDOSCOPIC, HISTOLOGIC AND SYMPTOM ASSESSMENT ARE MANDATORY FOR THE DIAGNOSIS OF POUCHITIS
H. Tulchinsky^{1,2}, I. Dotan^{1,3}, E. Brazowski⁴, Y. Dgani³, Z. Halpern³, M. Rabau^{1,2}
¹Pouch Clinic, ²Dept. of Surgery B, ³Dept. of Gastroenterology and Liver Diseases and ⁴Dept. of Pathology, Tel Aviv Sourasky Medical Center, Tel Aviv

FRIDAY, DECEMBER 17, 2004 (cont.)

11:45 - 12:30

Parallel Session 9 - B

Massada Hall

ENDOSCOPIC SURGERY - MISCELLANEOUS

Moderators: **A. Eitan**, Western Galilee Hospital,
Nahariya

S. Mizrahi, Soroka Medical
Center, Beer Sheva

- 11:45 MINIMALLY INVASIVE SURGERY FOR TREATMENT OF
HYPERPARATHYROIDISM
M. Mekel, **S. Davidovich**, A. Mahajna, S. Ish-Shalom, M. Barak,
A. Abu Salih, B. Bishara, T. Shen-Or, B. Raz, S. Jagger, M.M. Krausz
Dept. of Surgery 'A', Rambam Medical Center, and Technion -
Israel Institute of Technology, Haifa
- 11:55 130 LAPAROSCOPIC ADRENALECTOMIES
V. Avidan, Y. Armon, A. Vainstein, A. Mintz, J. Alberton, R. Spira,
P. Reissman
Dept. of Surgery, Shaare Zedek Medical Center, Jerusalem
- 12:05 THE ROLE OF LAPAROSCOPY IN ABDOMINAL TRAUMA
R. Inbar, R. Greenberg, B. Sagie, M. Simcha, A. Mayo, D. Sofer, S. Avital
Trauma Unit, Tel Aviv Sourasky Medical Center and Sackler
Faculty of Medicine, Tel Aviv University, Tel Aviv
- 12:15 A NOVEL TECHNIQUE FOR LAPAROSCOPIC
HERNIOPLASTY: EXPERIENCE WITH THE LAPAROSCOPIC
APPLICATION OF THE PROLENE HERNIA SYSTEM (PHS®)
I. Maershon-Simion, K. Dayan, O. Landau, S. Keyzer, I. Charuzi,
M. Muggia-Sullam
Dept. of Surgery B, Edith Wolfson Medical Center, Holon

FRIDAY, DECEMBER 17, 2004 (cont.)

12:30 – 13:40

Parallel Session 10 - A

Eilat Hall



COLON AND RECTAL SURGERY - ANORECTAL

Moderators: **B. Shpitz**, Sapir Medical Center, Meir
General Hospital,
Kfar Sava
A. Rosen, Edith
Wolfson
Medical
Center,
Holon

- 12:30 NIPHIDPINE SUPPOSITORIES - A BETTER NON-SURGICAL
TREATMENT MEANS FOR ANAL FISSURE
A. Rosen, B. Medalion, T. Ezri*
Dept. of Surgery "A" and Anesthesiology*, Edith Wolfson
Medical Center, Holon, and Sackler Faculty of Medicine, Tel
Aviv University, Tel Aviv
- 12:40 STAPLED TRANS ANAL RECTAL RESECTION (STARR) FOR
OBSTRUCTED DEFECACTION - REPORT OF 6 CASES
R. Greenberg, S. Avital, Y. Skornick, N. Werbin
Dept. of Surgery 'A', Tel Aviv Medical Center, and Sackler
Faculty of Medicine, Tel Aviv University, Tel Aviv
- 12:50 STAPLED HEMORRHOIDECTOMY FOR THE TREATMENT OF
HEMORRHOIDS
I. Waksman¹, A. Bickel¹, D. Kniaz¹, M. Weiss¹, A. Szabo¹, W. Kraim²,
A. Hadary², C. Kozakov², D. Nordkin², A. Eitan¹
Dept. of Surgery, Western Galilee Hospital, Nahariya¹, and Rivka Ziv
Hospital, Zefat²
- 13:00 SHORT-TERM RESULTS OF MULTIPLE-SESSION PHENOL INJECTION
SCLEROTHERAPY FOR HEMORRHOIDS IN PATIENTS WITH
COAGULOPATHY
M. Ventureiro, D. Scott, A. Valeanu, D. Zippel, S. Eldar, M. Sarely,
J. Kuriansky, D. Barsuk, A. Feigin, MZ. Papa, M. Koller
Section of Colorectal Surgery, Dept. of Surgical Oncology C, Chaim Sheba
Medical Center, Tel Hashomer
- 13:10 DOPPLER GUIDED TRANSANAL HAEMORRHOIDAL DEARTERIALISATION
FOR THE TREATMENT OF SYMPTOMATIC HAEMORRHOIDS
P.P. Dal Monte, C. Tagariello, M. Saragò, C.Mwangemi*
Casa di cura M.F. Toniolo, Bologna, Italy, *Policlinico S.Orsola-Malpighi,
Bologna, Italy
Sponsored by G.F. Medical Division
- 13:20 Discussion

FRIDAY, DECEMBER 17, 2004 (cont.)

Parallel Session 10 – A (cont.)

- 13:30 CLOSING REMARKS
Y. Ziv, Assaf Harofeh Medical Center, Zerifin
- 13:45 Light Lunch 
- 14:45 Meet in the Hotel Lobby for departure for Social Event at the Dolphin Reef
- From 18:30 Dinner, Hotel Dining Room 
- 21:00 Entertainment by the Moran Singers in the Eilat Hall

12:30 - 13:30

Parallel Session 10 - B

Massada Hall

VIDEO SESSION - ENDOSCOPIC SURGERY

Moderators: **N. Beglaibter**, Hadassah University Hospital

-

Mount Scopus, Jerusalem

M. Rubin, Rabin Medical
Center, Campus Beilinson,
Petach Tikva

- 12:30 LAPAROSCOPIC REPAIR OF MORGAGNI'S HERNIA
O. Avrutis, J. Meshoulam, V. Michalevsky, O. Sibirsky, A. Durst
Bikur Cholim Hospital, Jerusalem
- 12:38 LAPAROSCOPIC HAND ASSISTED SPLENECTOMY FOR MASSIVE
SPLENOMEGLY
A. Vainstein, R. Spira, J. Alberton, P. Reissman
Dept. of Surgery, Shaare Zedek Medical Center, Jerusalem
- 12:46 LAPAROSCOPIC EXCISION OF PANCREATIC
NEUROENDOCRINE TUMOR
H. Kais, Z. Halpern, A. Halevy
Division of Surgery, Assaf Harofeh Medical Center, Zerifin
- 12:54 LAPAROSCOPIC EXCISION OF A HUGE ADRENAL CYSTIC LESION
M. Badriyyah, N. Beglaibter, A. Nissan
Dept. of Surgery, Hadassah University Hospital, Mount Scopus, Jerusalem
- 13:02 LAPAROSCOPIC TECHNIQUE OF URETEROLYSIS IN AN IDIOPATHIC
RETROPERITONEAL FIBROSIS
A. Konstantinovsky¹, Y. Mecz¹, B. Appel¹, B. Friedman¹, N. Geron²,
A. Stein¹
Urologic Dept., Carmel Medical Center, Haifa¹, and Dept. of Surgery, Poria
Medical Center², Tiberias
- 13:10 LAPAROSCOPIC TREATMENT OF ENTEROVESICAL FISTULA

A. Tsivian, **O. Brodsky**, S. Kyzer, S. Benjamin, A.A. Sidi
Depts. of Urologic Surgery and General Surgery B, Edith Wolfson Medical
Center, Holon

FRIDAY, DECEMBER 17, 2004 (cont.)

Parallel Session 10 – B (cont.)

13:18 CLOSING REMARKS
A. Szold, Tel Aviv Sourasky Medical Center, Tel Aviv

13:45 Light Lunch



14:45 Meet in the Hotel Lobby for departure for Social Event at the Dolphin Reef

From 18:30 Dinner, Hotel Dining Room



21:00 Entertainment by the Moran Singers in the Eilat Hall

SATURDAY, DECEMBER 18, 2004

10:00 - 10:40

MADANES

Massada Hall

10:00 ESTATE PLANNING
I. Peleg, Madanes, Insurance Agency Ltd.

ABSTRACTS
ORAL PRESENTATIONS

ADVANCES IN THE SYSTEMIC TREATMENT OF COLORECTAL CANCER

David P. Kelsen, Chief, Gastrointestinal Oncology Service;
Edward S. Gordon Chair in Medical Oncology; Memorial Sloan-Kettering Cancer Center, New York, USA

There has been significant progress in this systemic therapy of colorectal cancer over the last five years. The identification of several new cytotoxic agents, and several new biologic agents, has led to a substantial increase in the clinical benefit, whether measured as palliation of advanced disease, or critically, an increase in the cure rate for patients with locally advanced resectable tumors. Combinations of these new agents, and sequencing of different regimens have extended the duration of tumor control in patients with stage IV unresectable disease. For patients with disease limited to the liver, preliminary data suggest the ability to convert at least some patients who are unresectable to operable status, with at least some patients achieving disease free survival.

Oxaliplatin-fluorouracil-leucovorin (FOLFOX) and irinotecan-fluorouracil-leucovorin (FOLFIRI) have both undergone extensive phase III random assignment study. In a series of trials, FOLFOX has been compared to IFL, with an improvement in outcome as measured by improved response rates, less toxicity, and improved time to progression. An overall survival advantage was demonstrated for the infusional fluorouracil arm (FOLFOX). In separate studies, the combination of FOLFIRI has been compared to FOLFOX. These two regimens show equivalence. Importantly, sequencing therapy led to median durations of survival for patients with inoperable stage IV disease in excess of twenty months. The net result of these trials is that the use of infusional fluorouracil regimens including oxaliplatin or irinotecan have become standard of care options in North America.

Bevacizumab (Avastin) is a fully humanized monoclonal antibody which binds the VEGF; ligand. In a large pivotal trial, the combination of bevacizumab plus fluorouracil leucovorin chemotherapy was markedly superior to chemotherapy alone. While tolerable, toxicity with bevacizumab should not be underestimated. Approximately 1.5 % of patients will develop perforation or bleeding, and up to 5% of patients may have thromboembolic events. None the less, bevacizumab plus cytotoxic chemotherapy is reasonably well tolerated by the majority of patients and is an option for first line therapy. The combination will shortly be studied in both the adjuvant and neoadjuvant setting.

Cetuximab (Erbix) is an antibody whose target is the EGFR receptor. When given in combination with irinotecan, cetuximab is capable of inducing palliative remissions in approximately 20%-25% of previously treated patients who are resistant to irinotecan based chemotherapy. Phase III trials comparing cetuximab plus chemotherapy to avastin plus chemotherapy to a combination of all three are about to be launched.

For patients with stage III disease, who have undergone potentially curative resection, post operative adjuvant therapy FOLFOX offers a modest but real improvement in three year disease free survival compared to fluorouracil

leucovorin alone. Recent data strongly indicates that three year disease free survival accurately tracks five year overall survival, with data persuasive enough that oxaliplatin was recently approved by the FDA for use in stage III patients after following surgical resection.

Lastly, the identification of the molecular targets predicting both toxicity and response in a variety of solid tumors holds a promise for the ability to customize treatment to the individual patient. These correlative studies are also well underway.

In summary the identification of both new cytotoxic agents and new biologic agents has led to substantial improvement in the prognosis for patients with colorectal cancer.

ASSESSING THE LEARNING CURVE FOR LAPAROSCOPIC COLORECTAL SURGERY - LESSONS LEARNED FROM OUR FIRST FORTY PATIENTS

Hila Hermon, Ron Greenberg, Eliad Karin, Yael Sobol, Eviatar Neshet, Moshi Shimcha, Ofer Kaplan, Yehuda Skornick, Shmuel Avital
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Introduction: Recent data regarding the oncological safety of laparoscopic colectomy for cancer combined with its potential benefits would motivate more surgeons to perform laparoscopic colorectal surgery.

Purpose: To assess factors related to the learning curve of laparoscopic colorectal surgery with emphasis on number of operations performed, type of procedures, major complications and oncological resections.

Methods: Evaluation of a prospective data collection of our first 40 laparoscopic colorectal surgeries performed in the past year with a comparison between the first 20 cases to the following 20.

Results: There were 18 males (45%) and 22 females (55%). Mean age was 68 years. Indications included cancer in 21 patients (52.5%), irretrievable Polyps in 7 (17.5%), diverticular disease in 6 (15%), and others in 6 (15%). Seventeen (42.5%) patients underwent right colectomy, 10 (25%) sigmoidectomy, 4 (10%) anterior-resection, 2 (5%) ileocecectomy and 7 (17%) other procedures. Six cases (15%) were converted. Mean operative-time was 170 minutes. Two patients (5%) died (one from PE and one secondary to his background illness). Significant surgical complications occurred in 6 patients (15%). There were no wound infections. Hospital stay averaged 9.3 days.

Comparison of the first 20 procedures to the next twenty revealed a significant decrease in major surgical complications (25% versus 5%). There was no difference in minor complications, conversions and operative-times. Mean number of harvested nodes was 15 in the first group and 20 in the second. All margins were negative.

Right colectomies had shorter operative-times (149 min vs 201 min) and lower conversion rate (0% vs 26%).

Conclusions: There is a significant decrease in major complications rate after the first 20 laparoscopic colorectal procedures. Appropriate oncological resection and the benefit of negligible wound infections-rate are achieved early in the learning curve. Right colectomies are easier to perform and are recommended as initial operations.

LAPAROSCOPIC RIGHT HEMICOLECTOMY-SHOULD THE ANASTOMOSIS BE DONE INTRA OR EXTRA-CORPOREALLY?

Sroka G; Eldar S; Kopelman T; Mady H; Matter I.

Department of general surgery, laparoscopic surgery unit , Bnai-zion medical center, Haifa, Israel

Background: Laparoscopic right hemicolectomy has emerged, in the last decade, as a feasible and safe procedure, for either benign or malignant disease. Recently it has been proven to be an acceptable alternative to open surgery for colon cancer. Technically, two main issues differ one surgeon from another in addressing this operation: 1. The approach to the right colon dissection could either be medio-lateral or vice versa. 2. The anastomosis could be performed either intra or extra-corporeally (laparoscopic assisted). So far there is no proven benefit in either approach.

Aims: the purpose of this study is to evaluate patient outcome and complication rate related to differences in the anastomotic technique.

Methods: Between 01/2002 and 07/2004, 34 patients went through laparoscopic right hemicolectomy in our department. 26 of them due to carcinoma of the right colon, 7 due to adenomatous polyps with moderate to severe dysplasia that were not amenable to endoscopic resection, and 1 due to colonic lymphoma. In all of the patients the approach to colon dissection was medio-lateral with identification of the right ureter before opening Toldt's fascia, and early and high lympho-vascular bundle ligation. In 16 the operation was laparoscopic assisted with creation of functional end to end anastomosis extra-corporeally and 18 went through a totally laparoscopic procedure with intra-corporeal anastomosis in the same manner, according to surgeon preference.

Results: Both groups were similar in patient age, sex, co-morbidities, operating time and blood loss. Oncologically – there was no significant difference in the number of lymph nodes dissected (mean 10, range 5-22), the distance of tumor from specimen's margins (mean 6 cm, range 3-9.5 cm), or in pathological staging. In the laparoscopic assisted group 3 patients had anastomotic leak that mandated re-laparotomy and re-anastomosis. No patient had such a complication in the totally laparoscopic group.($p < 0.01$). One patient from the extra-corporeal group went through re-anastomosis at the same operation due to twisted terminal ileum. The length of the operative wound was significantly shorter in the totally laparoscopic group (3.7 +/- 0.7 cm vs. 6.2 +/- 1.3 cm), and it's location was lower on the abdominal wall.

So far there is no difference between the groups in terms of tumor recurrence.

Discussion: During the totally laparoscopic procedure the anastomosis is created under vision of the proximal and distal bowel, which allow for their tension free approximation and prevent rotation of the anastomosed loops, mainly the terminal ileum. Unnecessary dissection of the distal transverse colon is also prevented with this approach. We believe that these circumstances are responsible for the significant difference in anastomotic leak rates. One should not forget, though, the need for high laparoscopic skills when performing hand sewn sutures. To conclude we believe that if one wants to follow oncological surgical principles, and avoid severe postoperative complications – the totally laparoscopic approach is superior. A future prospective randomized trial with long term follow up is still needed to confirm our conclusion.

LAPAROSCOPIC ASSISTED RESECTION FOR COMPLICATED CROHN'S DISEASE

Yaron Armon, Ram M Spira, Vered Avidan, Abi Vainstein, Oded Zmora, Dan Odeneimer, Petachia Reissman
Department of Surgery, Shaare Zedek Medical Center, Jerusalem, Israel

Background

Although the use of laparoscopy in Crohn's disease (CD) has become more common, the management of complicated CD is controversial due to the expected technical difficulties. We here represent our recent experience.

Patients and Methods

A retrospective analysis of all laparoscopic consecutive procedures performed for complicated CD (CCD) defined as large inflammatory mass or enteric fistulae and non-complicated CD (NCD) between 2002-2004.

All clinical data and outcome was recorded and analyzed.

Results – see table

42 patients had 43 laparoscopic procedures during a two-year period.

	Non Complicated CD	Complicated CD	Total
Total (operations)	18	25	43
Total (patients)	17	25	42
Male / Female	8 / 9	17 / 9	25 / 17
Age	32.5 (20-67)	28.5 (15-52)	30.2 (15-67)
Length of Disease (years)	10 (0-17)	7.4 (0-33)	8.4 (0-33)
Steroids	10 / 17 (58%)	19 / 25 (76%)	29 / 42
Immunosuppression	7 / 17 (41%)	12 / 25 (48%)	19 / 42
Infliximab	2 / 17 (12%)	4 / 25 (16%)	6 / 42
Inflammatory Mass	0	21	21
Fistula	0	16	16
Conversion	0	3 / 25 (12%)	3 / 43 (7%)
Length of Surgery (minutes)	201 (40-425)	218 (45 -350)	211 (40-425)
Complication - operative	2 / 18 (11%)	1 / 25 (4%)	3 / 43 (7%)
Complication – Post operative	3 / 18 (16%)	3 / 25 (12%)	6 / 43 (14%)
Length of Stay (days)	9.7 (4-22)	9.6 (5-23)	9.7 (4-23)

Twenty-two fistulae were found in 16 patients (6 ileo-ileal, 2 ileo-cecal, 1 ileo-transverse, 7 ileo-sigmoid, 4 ileo-vesicle, 1 ileo-vaginal and 1 recto-vaginal)

Complications included: 1 reoperation for suspected leak, which was not identified and treated observantly (NCD group), 2 intra-abdominal abscess (CCD group) and 3 post operative bleeding (2-NCD, 1-CCD). There was no mortality.

Conclusions

Laparoscopic treatment of complicated Crohn's Disease is feasible and safe in high volume hospitals. Although associated with higher conversion rate, the length of surgery, morbidity and length of stay are comparable to non-complicated CD.

LOW INCIDENCE OF ADHESION ILEUS AFTER LAPAROSCOPIC COLORECTAL SURGERY

Danny Rosin, Oded Zmora, Aviad Hoffman, Marat Khaikin, Barak Bar Zakai, Yaron Munz, Moshe Shabtai, Amram Ayalon
The Department of General Surgery & Transplantation, Sheba Medical Center, Tel Hashomer, Sackler School of Medicine, Tel Aviv

Background: Post-operative adhesions are a major cause of morbidity and medical expenses. Bowel obstruction is attributed to adhesions in nearly 40 percent of cases, many of which are following colon and rectal surgery. Laparoscopic surgery has the potential advantage of reduced adhesion formation, due to attenuated surgical trauma, less tissue handling and smaller scars. The aim of this study is to assess the rate of adhesion ileus after laparoscopic colon and rectal surgery.

Methods: Data regarding all cases of laparoscopic colon and rectal surgery was prospectively collected. Information relative to demographics, surgical procedures and follow up was analyzed, and patients who were readmitted for bowel obstruction were identified.

Results: Over a period of 8 years, 306 patients, at a mean age of 66.5 years, had laparoscopic colon and rectal operation in our department, 122 for benign conditions and 184 for malignant disease. Mean follow-up was 16 months. Six cases (1.9%) of bowel obstruction, unrelated to hernia or advanced cancer, were identified. Two patients had a history of open surgery in addition to the laparoscopic procedure, so adhesions can be attributed to the laparoscopic procedure in four patients (1.3%). Obstruction occurred within 2 weeks of surgery in two patients, and one early re-operation was required.

Conclusions: The incidence of adhesion ileus after laparoscopic colon and rectal surgery appears to be very low. This long-term benefit of laparoscopic surgery, with its related economic consequences, should be considered, in addition to the short-term advantages, when comparing this technique to its open counterpart.

306 LAPAROSCOPIC COLORECTAL PROCEDURES: SHORT-TERM AND ONCOLOGICAL LONG-TERM RESULTS

Danny Rosin, Oded Zmora, Aviad Hoffman, Marat Khaikin, Barak Bar Zakai, Yaron Munz, Moshe Shabtai, Amram Ayalon
The Department of General Surgery & Transplantation, Sheba Medical Center, Tel Hashomer, Sackler School of Medicine, Tel Aviv

Background: Laparoscopic surgery has recently gained wide acceptance in the treatment of colorectal pathologies, including cancer. Long-term outcome however requires further assessment. The aim of this study is to evaluate short and long term outcomes after 8 years of performing laparoscopic colon and rectal surgery.

Methods: Data relative to all patients who underwent laparoscopic colon and rectal surgery in our department was prospectively recorded. Demographics, operative procedure, post-operative course, oncologic treatment and follow-up data were reviewed in this study. Survival was calculated for patients with cancer who completed at least 3 years of follow-up

Results: 306 procedures were performed over a period of 8 years, 184 (60%) for malignancy and 122 (40%) for benign conditions. The number of procedures stabilized at around 50 per year, and included right colectomy (81), sigmoidectomy (80), Anterior resection (55) and left colectomy (34), and other procedures (55).

Mean operating time was 243 minutes, and conversion rate was 14.7%. Post-operative complications included wound infection in 16.9% and anastomotic leak in 5.2% of the cases. Re-operation was required in 9.1%, and overall post-operative mortality, including after emergency colorectal procedures, was 3.2%.

For the group operated for cancer until 2001, actual 3-year survival for all stages was 71%. Node-positive patients had 73% 3-year survival rate.

Conclusions: Laparoscopic colorectal surgery allows for acceptable short term and oncologic outcome, comparable to that achieved by open surgery.

THE LEARNING CURVE IN LAPAROSCOPIC COLECTOMIES: RESULTS AND CONSIDERATIONS

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Background

Laparoscopic colon resection was first reported in 1990. Since then, numerous studies have documented the benefits of the procedure: less pain, fewer complications, lower overall costs, and shorter length of stay and return of bowel function.

This approach was discussed during the years as a proper method for benign and malignant illnesses and for inflammatory and non-inflammatory states.

Methods

A consecutive series of patients underwent laparoscopic colectomy from Jan 2000 through Sept. 2004 at Bnai Zion Med. Center was analyzed. All Patients requiring sigmoid, rectosigmoid, rt. Colectomy, lt. Colectomy, APR and total colectomy for all colonic pathologies were included.

Results

A total of 128 cases from 152 were detected. Conversion rate was 12/128 (9.3%) cases due to multiple adhesions other technical difficulties or injury to the left ureter (n=1), colon (n=1) or aorta (n=1). Anastomosis was performed intracorporeally using endostaplers in the majority of cases (116/124). The operations were performed either by a senior surgeon (n=112) or by a resident directed by a senior surgeon (n=15). Post operative complication rate was 17.9%(23/128).

Conclusion

Laparoscopic Colectomy is a safe and feasible procedure that improves short-term outcome. Several recent articles have confirmed the safety of laparoscopy in colorectal and other types of abdominal cancer when the procedure is performed by experienced surgeons.

LAPAROSCOPIC-ASSISTED REVERSAL OF HARTMANN'S PROCEDURE: TECHNICALLY CHALLENGING BUT WITH CLEAR ADVANTAGES TO PATIENTS

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Purpose: Restoration of bowel continuity after Hartmann's procedure is a major operation, associated with substantial morbidity and mortality. The aim of this study was to address the difficulties of laparoscopic-assisted reversal of Hartmann's procedure (LARH) compared to its potential advantages and patient outcome.

Methods: During a period of 7 years 22 patients had LARH. Details regarding age, sex, diagnosis, comorbidities, operative time, conversion, complications, bowel movements and hospital stay were retrospectively reviewed.

Results: There were 14 male and 8 female patients with mean age of 56.2 and 65.9 years respectively. They were all operated by experienced laparoscopic surgeons. 18 were initially operated due to benign disease, mostly perforated acute diverticulitis, and the rest due to carcinoma. LARH was completed in 18 patients; 4 patients (18%) were converted to open surgery, due to adhesion problems in 3 patients and stapling device introduction problems in one. Median operative time was 182 minutes and median hospital stay was 6 days. First bowel movement took place 4 days after surgery. There were two major postoperative complications; the first had intraabdominal bleeding which needed re-operation and the second bled from two prepyloric ulcers which were treated by endoscopy and embolization. Overall surgical morbidity rate was 45 %. 27% of which was attributed to wound infection. The operative mortality rate was zero.

Conclusions: Laparoscopic-assisted reversal of Hartmann's procedure is technically challenging but feasible and safe in the hands of experienced laparoscopic surgeons. Furthermore, the advantages for the patients are clear as far as low morbidity, short hospital stay and return to normal life are concerned.

CONVERTED LAPAROSCOPIC COLON RESECTION; WHAT IS THE TRUE MORBIDITY?

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North Shore-Long Island Jewish Medical Center, New Hyde Park, NY, USA

Purpose: To assess the clinical outcome and true morbidity of converted laparoscopic colectomies as compared to open colectomies matched for diagnosis and severity of disease.

Methods: All consecutive laparoscopic colon resections performed by a single surgeon from 07/1996 to 10/2003 were assessed. Data obtained from a prospective computerized database included: demographics, diagnosis, reason and time to conversion, length of stay, morbidity, and mortality. Additionally, all laparoscopic-converted colectomies were then matched with opened colectomies by diagnosis and severity of disease and analyzed with respect to morbidity, mortality and clinical outcome.

Results: A total of 143 laparoscopic colon resections were analyzed. Of those, 78 were left colon resections and 65 were right colon resections. The overall conversion rate was 19.6%(28 patients). The disease entities of the 28 converted patients were diverticulitis (16), polyps (4), crohn's disease (3), cancer (3), others (2). Conversion was higher in the left-sided (24 patients; 30.8%) vs. right-sided (4 patients; 6.1%) procedures. There were no differences regarding age, gender, and co-morbidities among the laparoscopic, open, and converted groups. The median follow up was 39 months. The median length of stay was 6, 8, and 12 days for the laparoscopic, open and converted group, respectively. Morbidity and mortality are summarized in Table 1. Post-operative morbidity was significantly higher for laparoscopic procedures that converted to open procedures more than 30 minutes into the operation. Pre-operative predictors of conversion were extent of inflammatory process beyond the sigmoid colon and obesity, while intra-operative predictors were adhesions and bleeding.

Conclusions:

Converted laparoscopic colon resection is associated with significantly greater morbidity, particularly wound complications and greater length of stay, when compared to open or laparoscopic colectomies. Prompt conversion (less than 30 minutes) may reduce the overall morbidity associated with converted procedures. Furthermore, thoughtful patient selection may decrease the conversion rate and thereby prevent the inherent, exaggerated morbidity associated with converted procedures.

Table 1

Morbidity	Converted	Open	Laparoscopic
*ANOVA, P<0.0001	n=28(%)	n=28(%)	n=115(%)
Wound Infection*	9(32.1)*	3(10.7)	2(1.7)
Incisional Hernia*	8(28.5)*	2(7.1)	7(6.0)
Anastomotic Leak*	2(7.1)*	0(0)	1(0.8)
Postoperative bleeding	0(0)	1(3.5)	2(1.7)
Small bowel obstruction	0(0)	0(0)	2(1.7)
Enterotomy	1(3.5)	0(0)	0(0)
Fasciitis	1(3.5)	0(0)	1(0.8)
Mortality	1(3.5)	0(0)	3(2.6)

A PROSPECTIVE STUDY COMPARING HAND-ASSISTED LAPAROSCOPIC COLECTOMY WITH OPEN COLECTOMY

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Department of Surgery, Bikur Cholim Hospital, Jerusalem

Background: Hand-assisted laparoscopic colectomy (HALC) has evolved into a clinically useful surgical technique. Only few studies comparing HALC with standard open colectomy (OC) have been published to date. In a prospective non-randomized trial we compared the perioperative features and early clinical outcomes achieved with HALC versus OC performing for benign and malignant colorectal lesions.

Methods: A total of 86 elective patients were enrolled in the study. Forty-two HALC and 46 OC were performed (one patient in the each group was operated twice). The groups were comparable in terms of age, gender, comorbidity, previous abdominal surgeries, operative procedures, and simultaneous interventions. Statistical univariate analysis was done using chi-square test for categorical variables and t-test for continuous parameters. P values ≤ 0.05 were considered significant.

Results: There were no deaths in both groups. One HALC required conversion to open procedure (2.4%). The HALC patients had statistically significant lower intraoperative blood loss, smaller incision required, more rapid recovery of gastrointestinal function and earlier resumption of oral intake, less need for analgesia, and overall shorter hospital stay than OC patients ($p < 0.0001$). No statistically significant differences were observed regarding operative time, morbidity, and reoperation rates.

Conclusions: Hand-assisted laparoscopic colectomy is a safe and fast procedure with low conversion rate, which provides better perioperative results and early clinical outcomes with improved cosmesis compared to standard open colectomy.

GRACILIS MUSCLE TRANSPOSITION FOR FISTULAS BETWEEN THE RECTUM AND URETHRA OR VAGINA

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Background: Recto-vaginal fistulas in females and recto-urethral fistulas in males arise from diverse etiologies and are often difficult to repair with significant percentage of recurrence.

Aim: To assess the efficacy of gracilis muscle transposition in the treatment of these fistulas.

Methods: a retrospective charts review of patients who underwent gracilis muscle transposition for fistulas between the rectum and urethra/vagina was performed. Follow up was established by clinic visits.

Results: Five women and 3 men aged 30 to 64 underwent 8 gracilis muscle transpositions between 1999 and 2004. All patients had fecal diversion, either as a preliminary or concurrent step to fistula repair. Three recto-urethral, 3 recto-vaginal, 1 ano-vaginal, and 1 pouch-vaginal fistulas were repaired. The etiologies were Crohn's disease (2), iatrogenic injury to the rectum during radical prostatectomy (2), pelvic irradiation for rectal cancer (2) and cervical cancer (1), recurrent perianal abscesses and fistulas (1). Six patients underwent previous medical and surgical repair attempts. During a follow up period of 7-53 months, in 5 patients the fistula healed after the procedure and healing was maintained after stoma closure. Two are awaiting stoma closure. One recto-vaginal fistulas recurred. There were no intraoperative complications. Postoperative complications included wound infection in 3 patients: perineal (1), colostomy closure site (2).

Conclusions: Gracilis muscle transposition is a viable treatment option for fistulas between the urethra, vagina and the rectum, especially after failed perineal or transanal repairs. It is associated with low morbidity and a good success rate. Radiation and Crohn's disease are bad prognostic factors.

LAPAROSCOPIC REPAIR OF BILATERAL AND RECURRENT INGUINAL HERNIAS

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Ben Gurion University of the Negev, Beer Sheva, Israel

Background: With increasing laparoscopic skills many surgeons advocated laparoscopic repair as a method of treatment of bilateral and recurrent inguinal hernias. This retrospective review of consecutive series of patients underwent laparoscopic repair of bilateral and recurrent inguinal hernias in single institution.

Patients and methods: Between June 1996 and December 2003 348 patients with 101 unilateral recurrent and 254 bilateral inguinal hernias were treated by laparoscopic approach. 21 patients had bilateral hernia with unilateral recurrence, and 11 bilateral recurrent hernias. Follow-up was obtained by phone interview, examination, or both.

Results: The study group consisted of 340 male and 8 female patients with mean age of 57 years (range, 19 to 86). There were performed 60 TAPP and 295 TEP herniorrhaphies. The mean operative time was 48 for unilateral and 62 min for bilateral repairs, respectively. There was no conversion to open procedure. One patient has intraoperative tear of bladder, which was repaired laparoscopically. Minor postoperative complications occurred in (15%) of patients. Hernia sac seroma was the most common. Mean postoperative stay was 1.2 days (range, 0-10). Mean follow-up was 24.5 months (range, 2-90). In all, 312 (90.5%) patients were available for interview, and 291 (83.6%) were examined. Regular activity was resumed by 9.2 days (range, 1-48). Seven recurrences (2%) were observed: 3 following TEP and 4 after TAPP. Four of them were repaired laparoscopically and 2 conventionally.

Conclusions: Laparoscopic repair of bilateral and recurrent inguinal hernias is safe, effective and comfortable for patients, without increasing morbidity or recurrence rate.

COLORECTAL CANCER IN ISRAEL – GENETIC BACKGROUND AND POTENTIAL FOR PREVENTION

Gad Rennert

CHS National Cancer Control Center at Carmel Medical Center and B. Rappaport
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Colorectal cancer is the most common cause of cancer death and the second leading cancer in Israel. Family history is reported by some 15-20% of all colorectal cancer patients and specific genetic syndromes such as FAP or HNPCC account for about half of these cases. The MECC study is a population-based case-control study in Northern Israel which studied risk factors for colorectal cancer in 2,100 Israeli cases of colorectal cancer and 2,100 population controls.

Microsatellite Instability (MSI), the genetic defect responsible for HNPCC, was detected in 123 cases (9.8%) with at least two markers which exhibited instability, corresponding to the MSI-High (microsatellite instable) consensus definition. 11.9% of tumors in females and 7.7% in males had MSI-H tumors. No differences were noticed in the rate of MSI in different ethnic groups in Israel. Among MSI-H cases whose primary tumor site was known, 85/108 (78.7%) had right sided colon cancer which is in line with previously reported characteristics of the disease. The mean age in these subjects was 70 with no difference between MS-Instable and MS-Stable cases (p-value = 0.44). Median survival time was significantly improved in the MSI-H group (32.6 months +/-18) compared to those with MS-Stable tumors (29.9 months +/-18, Hazard Ratio 0.64, 95% CI 0.46-0.92, p=0.015).

The Ashkenazi APC pre-mutation I1307k was detected in 11.4% of the Ashkenazi CRC cases (and 7.1% of healthy controls) and was responsible for a 1.7-fold increase in risk. A similar risk, but with a much lower gene frequency (0.65% in the population), was noticed among Sephardic Jewish cases. I1307K APC was also found in Moslem Arabs, Christian Arabs and Druze, though in low frequency. Carriers of the BLM^{ash} mutation were also found to be at a higher risk of colorectal cancer. A variety of behaviors were found in the MECC study to be correlated with reduced risk of colorectal cancer. Among them are vegetable consumption, physical activity and regular use of mini-aspirin, statins and allopurinol. These means of prevention were similarly relevant for MSI-positive cases and for I1307k-positive cases. As most cancer cases with genetic background are easily identified by a significant family history (two cases or more diagnosed before the age of 70), it is of value to evaluate the family history of every new patient and to refer cases with family history to an experienced center for counseling. Such a process need involve people with multi-disciplinary expertise as all genetic syndromes carry potential for diseases outside the GI tract.

THE IMPACT OF NEO-ADJUVANT TREATMENT ON THE ACCURACY OF FDG PET-CT IN PATIENTS WITH COLO-RECTAL METATASES TO THE LIVER: COMPARISON WITH OPERATIVE AND PATHOLOGICAL FINDINGS

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Introduction and aim: FDG-PET and neoadjuvant chemotherapy before hepatic resection may improve the therapeutic management of patients with colorectal liver metastases. We meant to asses the impact of neoadjuvant chemotherapy on the accuracy of FDG-PET.

Methods: Patients were assigned to either neoadjuvant treatment or immediate hepatic resection according to the respectability and the risk of recurrence (MSKCC clinical score > 2). Neoadjuvant regimens were based on Irinotecan or Oxaliplatin. All were evaluated with CT and FDG-PET before treatment and before surgery. Surgery included intra-operative ultrasound (IOUS) and resection of all metastatic sites. Operative and pathological findings were compared to the CT and FDG-PET.

Results: 51 patients were studied. 24 patients, with 24 liver lesions, underwent immediate hepatic resection (group 1), and 27 patients, with 54 lesions, were operated following neoadjuvant chemotherapy (group 2). For group 1, FDG-PET was true positive (TP) in 20 lesions, false negative (FN) in 3 lesions and false positive (FP) in 1 case. Sensitivity was 87% and accuracy 83%. For group 2, FDG-PET was TP in 23 lesions, true negative (TN = complete FDG-PET and complete pathological response) in 18 lesions. It was FP in 3 lesions, and FN in 12 lesions (FN = complete FDG-PET response but not complete pathological response). The sensitivity, specificity and accuracy were therefore 66%, 86% and 73% respectively, significantly inferior to the results in group 1 (P= 0.03).

Conclusion: Sensitivity of FDG-PET decreases significantly following neoadjuvant chemotherapy. In this setting, the justification and extent of resection should be guided by additional imaging tools (CT and IOUS) and by the original imaging.

THE UBIQUITIN LIGASE SUBUNITS SKP2 AND CKS1 ARE NOVEL INDEPENDENT PROGNOSTIC MARKERS FOR SURVIVAL IN COLORECTAL CANCER

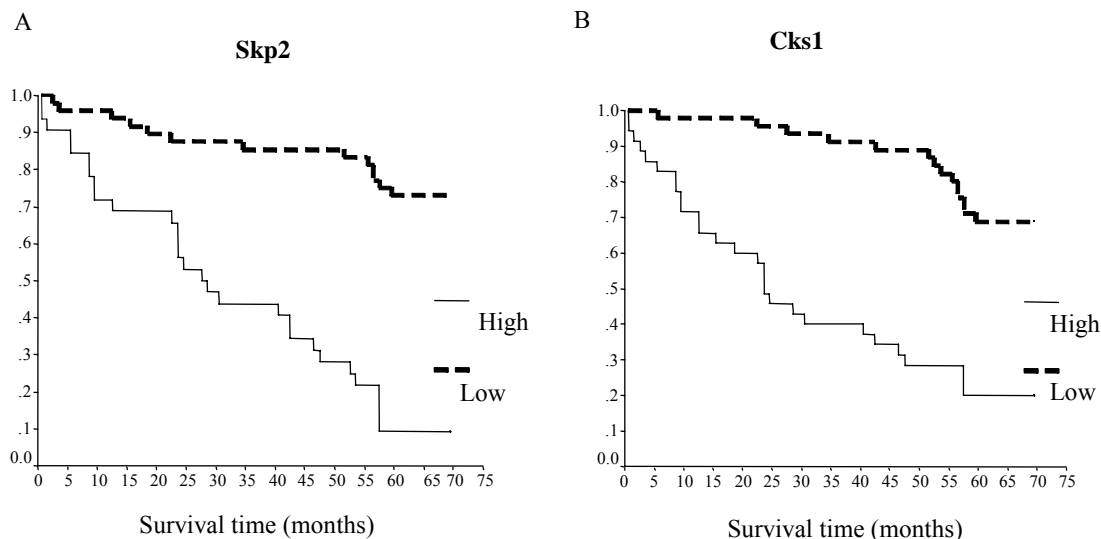
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Background: Loss of the cell-cycle inhibitory protein p27 is associated with aggressive tumor behavior and poor prognosis in colorectal cancer. The decrease in p27 levels is the result of increased proteasome-dependent degradation, mediated and rate-limited by its specific ubiquitin ligase subunits Skp2 and Cks1. We recently found that overexpression of Skp2 and Cks1 in colorectal cancer correlated with low p27 levels and poor tumor differentiation. The potential role of Skp2 and Cks1 as independent prognostic markers, however, is unknown.

Methods: Tissue samples from 80 patients operated for colorectal cancer at 1997 were subjected to Western blot analysis and immunohistochemistry using highly specific monoclonal antibodies against p27, Skp2 and Cks1. Results were plotted against patients' characteristics, disease stage and overall survival using Cox analysis and the Kaplan-Meier method.

Results: Skp2 and Cks1 expression strongly correlated with overall survival (HR 7.672; $p < 0.001$ and HR 5.026; $p < 0.001$, respectively; Figs A, B). Thus, high levels of these proteins, alone or in combination, accurately predicted poor prognosis whereas low levels predicted good overall survival rates. Moreover, after having stratified for p27, Skp2 and Cks1 expression significantly enhanced the predictive value for survival (HR 4.530; $p < 0.001$ and HR 4.236; $p < 0.001$, respectively). The strongest additive effect was observed in patients with stage II – III disease.



Conclusions: Skp2 and Cks1 expression strongly correlate with overall survival and may thus be used as novel independent prognostic markers in colorectal cancer.

SENTINEL LYMPH NODE (SLN) IN COLORECTAL CANCER

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Approximately 20 to 30% of Pts with stage I/II colorectal cancer die of metastatic disease in spite of undergoing curative surgery. SLN mapping may assist in CRC staging. Methods: Pts with CRC were prospectively enrolled. During surgery Lymphazurine 1% was injected sub-serosally into the area around the tumor and each dye-stained SLN was suture-tagged. H&E staining was performed. If it was negative for the presence of metastases, multiple cuts of SLN were taken and further examined by immunohistochemical staining (IHC) with Cytokeratin (CK-MNF/116).

Results: 87 Pts (45 males, median age 73 years, range, 40-90) were enrolled: Nine, 50, 25 and 3 Pts were in stage I, II, III and IV, respectively. An average of 15.6 nodes per patient was found. SLN were found during surgery in 45 Pts (48%). In 70 of 87 Pts, SLN were identified by the Pathologist (2.3 per patient). In 7 of those 70 Pts (10%), SLN were not examined by IHC due to the presence of metastasis on H&E staining in one patient and because of too many (7 to 9) stained SLN in 6 Pts. In 63 of those 70 Pts, SLN were examined with CK-MNF/116. In 9 of those 63 Pts (14%), metastases were found in lymph nodes but not in SLN. In 46 Pts we didn't find metastases either in the SLN or the other lymph nodes. In 8 Pts we found metastases in SLN using IHC that correlated with the finding on H&E staining in other lymph nodes. PPV was 100 %, NPV was 85 %, sensitivity of 50 % and specificity of 100 %.

Conclusions: SLN mapping was not accurate in directing us towards macroscopic identification of SLN. "Skipped" micro - metastases should warn us from adopting dye-stained SLN mapping technique.

PROLONGATION OF THE INTERVAL BETWEEN PREOPERATIVE CHEMORADIATION AND RECTAL CANCER SURGERY: THE EFFECT ON MORBIDITY AND PATHOLOGIC COMPLETE RESPONSE

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Background: Some authors consider a pathologic complete response (pCR) as a favorable prognostic factor for improved local recurrence and disease-free survival in patients with advanced rectal cancer. A trend toward increased pCR rate with prolongation of the interval between preoperative chemoradiation and surgery has been demonstrated.

Aim: To find whether increased chemoradiation-surgery interval affects the rate of pCR, as well as operative and post-operative morbidity and mortality.

Methods: All patients with locally advanced (T3-4 and/or N1) low and mid rectal cancer, which underwent neoadjuvant therapy followed by radical resection, between May 2000 and May 2004, were identified. The case notes were reviewed for: neoadjuvant regime, chemoradiation-surgery interval, pathology reports, operative time, intra-operative blood transfusion, post-operative complications, length of hospital stay, and mortality.

Results: Seventy-two patients (50 men: 22 women) with a median age of 61 (range 23-86) years were included. Median chemoradiation-surgery interval was 53 (range, 13-173) days. A pCR occurred in 16 (22.2%) patients and was not influenced by the interval duration. Minor and major complications were recorded in 32 (44%) patients. Patients with complications had a mean interval that was significantly shorter (51 versus 64 days) than in the non-complicated patients ($p=0.0251$). Median length of hospital stay was 9 (range, 6-23) days, shorter in patients with a longer interval period ($p=0.062$). The operative time (mean, 3.2 hours), and amount of blood transfusions (mean, 0.8 at operation) were not influenced by the interval length.

Conclusions: Our results demonstrate decreased morbidity with increased chemoradiation-surgery interval. However, pCR was not increased.

PLASMA PROLACTIN AND ITS TISSUE RECEPTOR IN COLORECTAL CARCINOMA - ITS ROLE AS TUMOR MARKER, THE POSSIBLE PATHOGENESIS AND ITS IMPLICATION ON TREATMENT

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Background: Prolactin (PRL) is polypeptide hormone, which was found to have an immunoregulatory role, both on the cellular and humoral immune system. PRL is associated with activation of T-cells, several autoimmune disorders, and malignancies including breast and prostate cancer. The aim of this study was to investigate its role in colorectal carcinoma (CRC).

Material and Methods: The blood samples of 57 consecutive CRC patients (men-31, female-26), who underwent an operation, in Hadassah Medical Center, were taken before and after the operation in sequence for 3 months later, and examined for CEA, CA19-9 and PRL levels, and compared to tumor Dukes' stage. Among the last 15 patients in our series, the PRL receptor (PRL-r) in the tissue tumor cells was tested by immunohistochemical analysis using monoclonal antibodies and correlated to the circulating PRL.

Results: Overall, circulating PRL levels raised in CRC before operation (men 45%, female-19%) and returned to normal soon after the operation. In comparison with CEA levels, CA19-9 levels, and stage, PRL levels were better correlated with CA19-9 levels in men ($r^2=0.52$, $p=0.026$), and were less associated with CEA levels, and not correlated with Dukes' Stage.

Among the last 15 patients in our series, 8 patients (4-men, 4-postmenopausal women) had high levels of plasma PRL (mean 1553, range 516-3677 mmol/l) and in 3 patients (38%) PRL-r was detected in the adenocarcinoma cells. Plasma PRL levels decreased in all these patients after the resection, as well, and stayed within normal limits at list for 3 months follow-up.

Conclusions:

- 1) High levels of prolactin were found in the plasma of colorectal cancer patients.
- 2) The source can be associated with the tumor, because its levels decreased sharply after resection. 2) Circulating prolactin may have a role as tumor marker, comparable to CEA.
- 3) Prolactin receptors have been demonstrated in colorectal cancer cells.
- 4) The interrelationship between plasma prolactin and prolactin receptors in colorectal carcinoma cells, yet has to be investigate.
- 5) Prospective randomized large scale studies is recommended for validation of our results. Even so, it might have potential significance on the treatment of colorectal cancer patients.

PROSPECTIVE EVALUATION OF LAPAROSCOPIC CHOLECYSTECTOMY AFTER PERCUTANEOUS CHOLECYSTOSTOMY

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Background: Emergency laparoscopic cholecystectomy has been advocated for the treatment of acute cholecystitis, however it can be a difficult task, especially in public hospitals, with relatively high conversion and complication rates. Percutaneous cholecystostomy is a simple and effective procedure allowing patients to recover from the acute event and allowing elective laparoscopic surgery at a later stage.

Method: We prospectively assessed a protocol of initial conservative treatment in patients admitted with acute cholecystitis with liberal use of percutaneous cholecystostomy in patients who did not respond to medical treatment. Following discharge the patients were seen in the out-patient clinic and elective laparoscopic cholecystectomy was considered and scheduled as necessary. Details of the operation were collected with emphasis on complications and conversion rates.

Result: During a three-year period, 224 patients who were admitted with acute cholecystitis entered the protocol. Fifty-four patients did not improve under medical treatment, and percutaneous cholecystostomy was performed. In spite of adequate drainage, 5 patients did not improve: Three patients were successfully operated upon urgently and recovered, while 2 patients died of sepsis. In 12 patients common bile duct stones were found and could be removed by ERCP prior to the elective operation. In five of them stones were demonstrated in a cholangiogram with contrast injected in the tube. Forty-nine patients were discharged with the catheter and later re-evaluated for elective operation. Twenty-five patients underwent delayed laparoscopic cholecystectomy with a low conversion rate (8%), and only minor complications (16%).

Conclusion: Conservative treatment and delayed operation is an acceptable choice in the treatment of acute cholecystitis. Percutaneous cholecystostomy is an effective tool, with better preoperative evaluation of the biliary system, high success rate and low morbidity, and allows for safe interval laparoscopic surgery.

THE MANAGEMENT OF IATROGENIC BILE DUCT INJURY DURING LAPAROSCOPIC CHOLECYSTECTOMY

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Cholecystectomy is currently the most common abdominal operation. The recommended method is laparoscopic surgery both for elective and urgent operations. .

The incidence of iatrogenic bile duct injuries during laparoscopic cholecystectomy ranges between 0.4% to 0.6% in various series. This incidence declined with time and experience from 2% in the early introduction of the method to 0.128% in one of the contemporary series.

Only 30% of major injuries are recognized immediately during surgery, in most cases it may take days until diagnosis is made. Late diagnosis may result in bile duct stricture, cholanghitis, and atrophy-hypertrophy complex in a small percentage of patients. Management of this situation is complex and specialized.

Our experience in treating 48 patients with bile duct damage following laparoscopic cholecystectomy is presented.

In this series, in 35 patients the damage to bile ducts was diagnosed during cholecystectomy or in the immediate perioperative period. These patients were treated in 10 different hospitals by a single surgeon (A.C).

Additional 13 patients were treated following the late development of stricture after initial bile duct repair.

All patients underwent reconstructive surgery (Roux en Y hepaticojejunostomy). Postoperative course was uneventful (3 patients developed bile leak which closed spontaneously), all patients were discharged after 6-11 days.

After a mean follow up of 6 years, 5 patients (3 emergency operations and 2 elective cases) developed stricture and recurrent cholanghitis and underwent either dilatation (3p), or re-operation (2p).

Our series shows the importance of a particular referral system that can treat the emergency cases at their home hospitals and arrive at an emergency basis at once, and treat the elective cases (those with late diagnosis and previous attempts of repair) in the referral center. This approach optimizes the therapeutic results.

KYPHOSCOLIOSIS AND PARAESOPHAGEAL HERNIA

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OBJECTIVE: Paraesophageal hernia (PEH) mandates surgical repair to avoid potentially life-threatening complications. The diagnosis is commonly made in old women. We noticed that many patients with PEH suffer from significant kyphoscoliosis and hypothesized that there could be a casual relationship between the two pathologies. The objective of this study was to evaluate the relationships between PEH and kyphoscoliosis.

METHODS: we retrospectively examined the imaging files of all patients who underwent laparoscopic PEH repair. Controls were patients who underwent laparoscopic cholecystectomy (LC) during the same time frame and were matched for age and gender.

RESULTS: Of the 90 patients, who underwent PEH repair in the past 6 years, 56 (62%) imaging files were available for the study. The average age was 73.5 (49-91) in the PEH group and 73.7 (50-91) in the LC group. There were 46 women and 10 men in both groups. The incidence of kyphoscoliosis was more than 3 times common in the PEH group; 22 patients (39%) in the PEH group and 7 (12%) in the LC group. All 22 patients with kyphoscoliosis in the PEH group were women. The average age of the scoliotic patients was 6 years older than non-scoliotic patients (77 vs. 71 respectively). There was no statistically significant difference in the severity of scoliosis between the PEH group and the LC group.

CONCLUSIONS: Kyphoscoliosis is a major risk factor in the evolution of PEH. Kyphoscoliosis may be the cause for the evolution of PEH by displacing the anchoring points the stomach and diaphragm to the spine and by stretching the ligaments around the lower esophageal sphincter.

OUTCOME ANALYSIS OF LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS FOR MORBID OBESITY

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Purpose: Review the experience with 585 laparoscopic Roux-en-Y gastric bypass (LRYGBP) procedures as the treatment of choice for morbid obesity.

Methods: 585 LRYGBP procedures were performed at a single institution, using the same technique. The mean preoperative BMI was 47 ± 7 kg/m² (range: 35 - 78). Twenty three patients underwent revision of a vertical banded gastroplasty (VBG) to RYGBP. Mean follow up was 11.07 months (range: 0.15-53.13 months).

Results: The postoperative mean weight loss and the mean percent excess weight loss were as follows:

Months	n	Mean Weight Loss (kg)	Mean % Weight Loss	Excess Mean BMI Change (kg/m ²)
2	542	19.8 ± 6	31.4%	7.0
6	362	36.1 ± 9.6	57.75%	12.8
12	287	46.3 ± 13.6	72.4%	16.4
24	60	49.0 ± 15.4	71.9%	16.8
36	21	44.0 ± 13.7	77.9%	15.9

Eight conversions occurred during the first 60 cases (13.3%) and 1 conversion thereafter (0.19%). The mean estimated blood loss was 49 ml. Median length of stay was 2 days. Mortality was 0.34% (2 deaths). There were 244 complications in 162 patients (27%), 112 of them (17%) required re-operations, 96 (84.9%) of which were performed laparoscopically. Of the pre-existing co-morbidities, 58% were resolved at 2 months postoperatively. The vast majority of patients decreased the number of pharmacological agents taken for these co-morbidities.

Conclusions: LRYGB, although technically challenging, can be safely performed with excellent long-term results. LRYGB achieves significant weight loss and improvement of preoperative co-morbidities with a minimal length of hospital stay and an acceptable complication rate.

THE TRANSITION INTO THE LAPAROSCOPIC ERA

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Since the introduction of laparoscopic surgery into our department's repertoire, the fraction of abdominal procedures performed by laparoscopic techniques has steadily increased during the last decade. The impact of this transition on overall operating time and on residents' training was evaluated.

Methods: The computerized records of all abdominal procedures performed between 1992 and the first quarter of 2003 were retrospectively analyzed. The relative fraction of open vs laparoscopic procedures (lap) and the mean operating times were calculated. In addition, colectomy, adrenalectomy, splenectomy and incisional hernias, performed between 1998 and 2003, were chosen as representing advanced laparoscopic procedures. The number and relative fraction of open vs lap of these procedures, performed by residents, were analyzed.

Results: Of all 9056 abdominal operations the relative fraction of open vs lap during this ten year period gradually increased, up to 89% in 2002. The mean operating time for all open procedures during the first 5 years was 89 ± 60 min, whereas the mean operating time for lap during the last 3 years was 94 ± 63 min. In the advanced laparoscopic procedures there was a gradual increase in the fraction performed by residents from a low of 11% and 23% in 1998 and 1999 to a high of 55% and 70% in 2001 and 2002 respectively.

Conclusions: The transition into the laparoscopic era caused a rise in overall operating time. This rise however was not excessive.

The significant change in lap vs open procedures mandated a change in the type of procedures performed by residents. As a result the majority of operations performed by residents are laparoscopic procedures and relatively few are done by open techniques. This raises major questions about the future of residents' training.

NiTi HandCAC Performance in Colonic Compression Anastomosis

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GI anastomosis is a crucial step in almost all GI procedures. In the search for a better surgical device to perform these anastomoses, a new instrument, the Compression Anastomosis Clip (Hand CAC), was investigated.

The Hand CAC (NiTi Medical Technologies Ltd., Netanya, Israel) is a double ring device made of nickel titanium that when cooled loses its rigidity and can be opened to an angle of about 30°. In that condition, it can be spread apart to enable easy introduction through a 5mm incision made in the two edges of the colon wall at the stumps left after resection.

At body temperature (37° in the intestine), the rings close tightly, creating the compression anastomosis. The two incisions are closed together by suturing and, within about 5-7 days, the clip is excreted with the stool, creating a perfect natural anastomosis.

In our present study, 60 patients with colonic tumors were assigned to be anastomised with a stapler or with the CAC.

In all the post-op parameters, such as hospital stay, bowel movements resumption, start of intake, complications, etc. the study group demonstrated results that were equal or better than the control group.

A six-month follow-up by colonoscopy showed a perfect anastomosis.

Our study showed that the use of the Hand CAC is safe, enables clean procedure, quicker and user friendly.

THE USE OF MRI FOR STAGING OF RECTAL CARCINOMA

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BACKGROUND. Preoperative staging of rectal cancer is of utmost importance in the process of decision regarding the treatment approach. The treatment algorithm is that preoperative chemo-irradiation should be given for T3 tumors, while T1 tumors should undergo surgery without any preoperative treatment. The available data about T2 tumors is controversial. The golden standard of preoperative staging until recently was that of TRUS and CT. However more and more data is accumulated regarding the accuracy of MRI evaluation in staging of rectal cancer.

METHODS. This is a prospective study based on five patients. All patients underwent a full physical examination, blood tests including tumor markers, colonoscopy and biopsy, rectoscopy, CT, TRUS and MRI. MRI was performed in two sets, at diagnosis, and in those patients, who underwent chemo-irradiation one day before surgery. As this was a preliminary study, the decision to preoperative chemo-irradiation was based on TRUS staging. The MRI evaluation was made without knowledge of CT or TRUS findings.

RESULTS. MRI showed good accuracy in 3 patients with T3 tumors defining pelvic anatomy (mesorectal fascia, Denonvillier's fascia, peritoneal reflection and presacral plexus). However in one patient with T2 tumor overstaging was made and in another patient a T1 tumor could not be defined. All metastatic lymphnodes in the mesorectum were determined accurately. TRUS was accurate in all the cases for the determination of depth of invasion and perirectal lymphnode involvement.

CONCLUSION. In this small preliminary study MRI was accurate for T3 tumors and visualization of pelvic anatomy, however for early tumors TRUS showed better accuracy than MRI.

PSYCHOPATHOLOGY AND QUALITY OF LIFE AMONG PATIENTS WITH CHRONIC IDIOPATHIC CONSTIPATION: A COMPARISON TO HEALTHY CONTROLS

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Background: Constipation, may be a symptom of psychiatric disorder or a side effect of its treatment and have an impact on life quality.

Aims: To characterize life quality and psychopathology in a group of CIC (Chronic Idiopathic Constipation) patients and compare it to healthy controls.

Methods: Consecutive patients complaining of constipation and fulfilling the Rome II criteria were evaluated and compared to a group of healthy controls. All filled SCL-90 and SF-36 questionnaires, in order to evaluate psychopathology and life quality.

Results: 192 patients were evaluated (mean age 37.3±14.5. 149 women), and compared to 156 healthy subjects (mean age 28.5±10.8. 92 women). CIC patients were found to be have more somatization (p=0.0001), and to demonstrate lower quality of life on six of eight parameters. Patients complaining of bloating were characterized by reduced quality of life on six of eight parameters. In addition, these patients displayed more psychopathology than patients without bloating, both on the global severity index of their symptoms as well as on four of nine parameters. Patients with excessive perineal descent were found to have significantly higher scores on the hostility index. No significant differences in life quality and psychopathology were found comparing patients with colon inertia to those with anismus.

Discussion: Although their quality of life is worse than healthy controls, CIC patients are not characterized by more psychopathology than healthy controls. However, they are more concerned about their physical condition. Constipated patients complaining of bloating create a unique group characterized by a significant psychopathology and reduced quality of life.

ENDOSCOPIC, HISTOLOGIC AND SYMPTOM ASSESSMENT ARE MANDATORY FOR THE DIAGNOSIS OF POUCHITIS

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Background: Restorative proctocolectomy (RPC) is the operation of choice for ulcerative colitis, with good long-term results. Pouchitis is the most common RPC-related complication, occurring in a significant number of patients depending on duration of follow up and diagnostic criteria. Pouchitis is often diagnosed based on symptoms alone.

Aim: To determine whether endoscopic and histologic evaluation are required together with symptom assessment for the diagnosis of pouchitis.

Methods: Fifty consecutive patients after RPC seen at the pouch clinic between 2003-2004 underwent clinical assessment, pouch-endoscopy and biopsies. The Pouch Disease Activity Index (PDAI) comprised of independent clinical, endoscopic and histologic severity scores was used. Pouchitis was defined as PDAI \geq 7.

Results: Twenty-seven patients (54%) had pouchitis with significantly higher clinical, endoscopic and histologic scores compared with 23 (56%) patients without pouchitis. Demographic data were similar between the two groups. Mean time after RPC was 3.8 \pm 3.2 years. Stool frequency was the most common symptom. Erosions were the most common endoscopic finding both in patients with (60%) and without (47%) pouchitis. The three scores: symptoms, endoscopy and histology similarly contributed to total PDAI in 70% of pouchitis patients, and clinical score alone was never a major factor. In contrast, 40% of patients not meeting the PDAI definition of pouchitis had major clinical symptoms. Two thirds of them were refractory to antibiotic treatment, in contrast to 85% response in the pouchitis group.

Conclusions: Symptoms alone do not reliably diagnose pouchitis. All PDAI components-clinical, endoscopic and histologic are mandatory to correctly diagnose pouchitis.

MINIMALLY INVASIVE SURGERY FOR TREATMENT OF HYPERPARATHYROIDISM

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Background: Bilateral neck exploration through a wide lower cervical incision under general anesthesia has been until recently the gold standard surgical approach for parathyroidectomy in hyperparathyroidism. Minimal invasive surgery for parathyroidectomy has been introduced in order minimize the surgical incision, morbidity, cost, extent of exploration, length of the surgical procedure and length of hospital stay, while maintaining the best outcome.

Objective: To evaluate the contribution of the sestamibi-SPECT (MIBI) localization, cervical ultrasonography (US) and intraoperative rapid turbo intact parathormone assay (iPTH) in minimal invasive parathyroidectomy.

Methods: Between August 1999 and October 2004, 179 consecutive patients were treated for hyperparathyroidism using the MIBI and/or US for preoperative localization and iPTH measurements before induction of anesthesia and 10 minutes after resection of the pathological gland(s), and further measurements if found necessary. A reduction in iPTH of more than 50% baseline iPTH within 10 minutes with pathological confirmation of a parathyroid was considered an indication for termination of the surgical procedure. 11 patients had a previous parathyroid exploration.

Results: Parathyroid adenoma was detected in 126 patients, primary hyperplasia in 22 patients, secondary hyperplasia in 23 patients, tertiary hyperplasia in 5 patients and parathyroid carcinoma in 1 patient. In 100 of the 126 patients (79.3%) with an adenoma minimal invasive exploration of the neck was used, and in 20 of these patients this procedure was performed under local cervical block anesthesia in awake patients. The duration of the surgical procedure was 20 to 330 minutes (mean 86 minutes, median 80 minutes). The duration of hospitalization was 0 (The patient was released on the same day of the surgical procedure) to 18 days (mean 2.8 days, median 2.0 days). The MIBI scan correctly diagnosed an adenoma in 74% of the patients, while US correctly diagnosed an adenoma in 62% of the patients. The addition of US to MIBI increased the rate of detection of an adenoma to 83% ($p < 0.001$). The preoperative mean iPTH in patients with primary adenoma was 201.5 ± 161.7 and the post-resection iPTH was 38.8 ± 28.9 ($p < 0.001$). The preoperative iPTH in patients with primary hyperplasia was 170.6 ± 89.6 pg/mL, and the post-resection iPTH was 50 ± 62 pg/mL ($p < 0.001$). In patients with secondary or tertiary hyperplasia the preoperative iPTH was 1092.5 ± 698.7 pg/mL, and the post-resection iPTH 186.4 ± 154.2 pg/mL ($p < 0.001$). In 2 of the 179 patients (1.1%) iPTH was not significantly reduced during the initial surgical procedure. Three patients (1.7%) underwent reoperation due to persistent or recurrent elevation of PTH.

Conclusions: Preoperative localization of the parathyroid gland by MIBI and US and intraoperative iPTH measurements, resulted in an overall cure rate of 98.3% for the entire series. The addition of US to the MIBI scan increased the rate of detection of an adenoma to 83%. Minimal invasive surgery with minimal morbidity, avoiding bilateral neck exploration, was achieved in 79.3% of patients with a single gland disease

130 LAPAROSCOPIC ADRENALECTOMIES

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Introduction: Laparoscopy offers adequate surgical exposure with 5-10mm incisions. In Adrenalectomy, this comes in exchange to a wide laparotomy and its associated extensive tissue injury and metabolic response to the surgical trauma. This made Laproscopic Adrenalectomy (LA) become the gold standard approach for resection of adrenal tumors soon after its introduction.

We here present a series of 130 LA.

Patients & Methods: 130 consecutive LA performed under the supervision of one surgeon (P.R.) during 1996-2004 in 2 university affiliated medical centers. Preoperative diagnoses, operative data, pathological diagnoses and postoperative outcomes were recorded and analyzed.

Results: 118 patients underwent 130 adrenalectomies: 72 left, 58 right, 10 synchronous bilateral, and 2 metachronous bilateral adrenalectomy.

67 patients were females and 51 were males.

Mean age was 49.8 (± 15.5) years, range 6-81.

Indications were: Conn's syndrome 25 (21%), Cushing's syndrome 34 (28%), Pheochromocytoma 31 (26%), Non functional mass 20 (17%), Other 8 (7%).

There were 5 (4.2%) conversions to open surgery. Last conversion was case #37.

Mean operation length was 130.7 (± 45.8) min (excluding converted operations).

Mortality rate was 0.8% (1/118), due to vertebrobasilar stroke in a 70y old hypertensive patient.

There were 5 (4%) major and 8 (6.6%) minor intraoperative complications (Table 1), 4 (3.3%) major and 10 (8.3%) minor postoperative complications (Table 2).

Table 1: Intraoperative complications

Major	IVC tear	2
	Acute coronary syndrome	1
	Arrhythmia with hemodynamic compromise	1
	Kidney ischemia (upper pole)	1
	Total	5
Minor	Pneumothorax	5
	Splenic nick	2
	Liver nick	1
	Total	8

Table 2: Postoperative complications

Major	CVA, coma, death	1
	Pulmonary edema	1
	Retroperitoneal hematoma	1
	UGI bleeding	1
	Total	4
Minor	Fever, unspecified	4
	UTI	2
	Bilateral pneumonia	1
	Surgical site infection	1
	Gastric dilatation	1
	Lt arm paresis	1
	Total	10

Mean length of postoperative stay was 4.42 (\pm 2.38) days.

Histopathological diagnoses were: Adenoma 62 (48%), Pheochromocytoma 34 (26%), Hyperplasia 17 (13%), Metastases 4 (3%), Carcinoma 1 (0.7%), Other 12 (9%).

Mean tumor size was 3.2 (\pm 2.4) cm, range 0.3-11.

Conclusions: Laparoscopic adrenalectomy is a safe procedure, with low intra- and postoperative morbidity rates and very low mortality rate when done in high-volume medical centers.

**A NOVEL TECHNIQUE FOR LAPAROSCOPIC HERNIOPLASTY:
EXPERIENCE WITH THE LAPAROSCOPIC APPLICATION OF THE
PROLENE HERNIA SYSTEM (PHS®)**

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Large inguinal defects pose a special problem with the laparoscopic repair of inguinal hernias (LRIH). A novel technique has been developed applying the PHS (Ethicon) laparoscopically.

Objective: To review our experience and results of consecutive LRIH using various techniques.

Technique: Using TEP or TAPP approach the PHS was applied whenever a large defect was noted. The onlay portion was trimmed and the connector inserted into the opening. This was covered with an additional patch in the usual manner.

Material and Methods: Patients' charts that underwent LRIH during 5 years were retrospectively reviewed. Data were collected for technique, operative time, complications, length of stay and reoperation.

Results: 979 patients underwent LRIH; 81% were male, mean age – 56.9 years (19-94), mean operative time – 55'(15-140), length of stay 2.3 days (1-7). 84% were bilateral, 63 recurrent (4 following TEP). In 183 patients the PHS was used, of those - 73% direct, 80% TEP. 4 operations were converted following a major intra-operative complication (laceration of urinary bladder, small bowel, sigmoid or major vessel). Overall complication rate – 2.8% (Urinary retention, seroma, intra-abdominal hematoma, fever and headache). No patient with PHS required reoperation.

Conclusions: The PHS may be applied laparoscopically. It may lower the recurrence rate of large inguinal defects without increasing complications and without major differences in operative time.

NIPHIDIPINE SUPPOSITORIES-A BETTER NON-SURGICAL TREATMENT MEANS FOR ANAL FISSURE

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Chronic anal fissure is one of the most frustrating and painful anal pathologies and is associated with sphincter spasm and bleeding.

For years the only effective treatment for anal fissure was surgery: anal dilatation as described by Miles in 1903 , followed by lateral internal sphincterotomy.

Recently, new chemical agents for sphincter pressure reduction came up and started to replace surgery in the treatment of anal fissure starting from Isoket spray

moving to nitroglycerin creame, niphidipine creame and botox injections.

We decided to use niphedipine (for its lower side effects) in the form of suppositories to improve the impact of muscle relaxation directly on the internal sphincter. We also added polyethylene glycol as a stool softner.

This study evaluates the efficacy of four non-surgical means of treatment of anal fissure: nitroglycerine cream, nifedipine cream, nifedipine plus nitroglycerine creams administered together and -nifedipine suppositories, in the healing process of anal fissure.

Between 1999-2003, 251 patients were treated for chronic anal fissure. There were no differences among the 4 groups in regard to age, sex, fissure location, bleeding, constipation and associated diabetes mellitus. Outcome of treatment (healed fissure) was also similar and achieved high percentage in all groups.

Although patients in group 3 (nifidipine suppositories) had more pain and longer time of complains (P=0.001), healing was faster with this medication (P=0.001), and the recurrence rate was lower (P=0.001).

We do believe that non surgical treatment of anal fissure is an effective one and worth trying prior to surgery.

According to this study, nifidipine suppositories resulted as most effective.

Table 1 – Demographic data and outcome of treatment

Group Variable	Nitro cream N = 27	Nifedipine cream N = 37	Nitro cream + nifedipine cream N = 154	Nitro suppository N = 28	P - value
Age - years	36±13	42±16	39±16	38±16	0.47
Sex %					0.38
Female	70.4	70.3	78.4	85.7	
Male	29.6	29.7	21.6	14.3	
Fissura location %					0.4
Posterior					
Anterior	85.2	91.9	75	85.1	
Mixed	14.8	5.4	17.9	13	
	0	2.7	7.1	1.9	
Time of complain %					0.001
<3 months	33.3	21.6	17.9	12.4	
3-6 months	37	27	39.3	66.2	
>3 month	29.7	51.4	42.8	21.4	
Bleeding %	96.3	94.6	96.8	96.4	0.9
Pain %	85.2	86.5	85.7	99.4	0.001
Constipation %	51.9	54.1	60.7	63.6	0.5
Diabetes %	3.7	8.1	3.6	1.9	0.3
Time of treatment %					0.001
Up to 1 month	25.9	18.9	21.4	100	
1-3 months	34.2	39.5	26.3	0	
> 3 months	25.9	40.5	42.0	0	
Recurrence rate%	3.7	5.4	0.9	3.5	0.08
Complications%					
- Headache	18	0	0	7.1	0.001
- Hypersensitivity	5.4	2.7	3.2	0	0.1
Outcome of treatment* %	85.2	86.5	92.9	87.7	0.8

* Healed fissura

Statistical analysis was performed with the two-way ANOVA test for continuous variables and Chi-square for categorical variables. Multivariable logistic regression analysis was applied to the data set in order to identify factors that may have impact on the main outcome of the study (healing of the fissura). Results are expressed as mean±SD, median (range) and percentage. A $p \leq 0.05$ was considered significant.

STAPLED TRANS ANAL RECTAL RESECTION (STARR) FOR OBSTRUCTED DEFECATION - REPORT OF 6 CASES

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Purpose: The aim of this study is to present our initial experience with a new technique for treating obstructed defecation using a 33 mm circular stapler.

Methods: Six patients with obstructed defecation non-responding to medical treatment and biofeedback were enrolled for this procedure. All were evaluated by the constipation scoring and continence grading system, clinical examination, colonoscopy, dynamic defecography, anorectal manometry, transanal ultrasound and anal EMG. They were all found to be affected with a descending perineum, intussusception, distention rectocele, internal mucosal prolapse or hemorrhoids. Using a transparent anoscope three full thickness semi-pursestring sutures were prepared 4, 6 and 8 cm distal to the dentate line in the posterior and then the anterior rectal wall. A transanal circular stapler was used to amputate a sleeve from the rectal wall. Surgical and functional outcome were assessed at 6 weeks and 3 and 6 months after surgery.

Results: There were 2 males and 4 females with a mean age of 69 years and median duration of symptoms of 11.5 years. The mean operative time was 58 minutes. The operation was performed under general (3 patients) or regional anesthesia (3 patients). There was no mortality, new incontinence, fecal impaction, urinary retention, persistent pain or mortality. All patients had symptomatic relief and the operation reduced symptoms of abstracted defecation (17 vs. 5, preoperative vs. postoperative $P < 0.001$).

Conclusion: Stapler transanal rectal resection may be a useful new surgical technique for the treatment of obstructed defecation. A long follow up on a larger number of patients is needed to confirm these primary results.

SURGICAL TREATMENT FOR CHRONIC ANAL FISSURE IS STILL EFFECTIVE AND SAFE. OUR EXPERIENCE WITH 1311 OPERATED CASES

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Introduction: anal fissure is a common painful condition associated with internal anal sphincter hypertonia.

chronic anal fissure is a linear ulcer characterized by scar tissue, hypertrophic anal papilla and sentinel skin tag, and does not usually heal without treatment.

The treatment of chronic anal fissure has shifted in recent years from surgical to medical.

Methods: 57,000 patients with ano-rectal disturbances were examined from July 1993 to July 2004 in a dedicated proctological outpatient clinic. Of those 2395 suffered from chronic anal fissure.

All patients received first line medical treatment with stool softeners and topical treatments including Nitroglycerin and Nifedipine.

Medical treatment was successful in 791 (33.02%) patients and 1604 (66.98%) patients required surgery. Of those cases requiring surgery 996 were operated at our hospital. A close Lateral Internal Sphincterotomy was performed in 909 (91.2%), open sphincterotomy in 87(8.8%) of the patients. Most of the patients were discharged several hours after the procedure. Follow ups were after 2 weeks, 2 months, 6 months and 1 year.

Results:

All but 21 of the operated patients stressed that the pain and bleeding disappeared within 2-6 days after surgery.

In 11 cases (1.1%), a subcutaneous infection appeared within the first few post surgical days. These were treated either by antibiotics or surgery.

Recurrence was reported in 17 cases (1.7%) 12 males, 5 females.

Incontinence for soft stools and gas was indicated in 14 cases (1.4%) 5 males, 9 females.

Conclusion:

Closed or open lateral internal sphincterotomy is still a safe and effective treatment for chronic anal fissure, as demonstrated by our results. This is in contrast with the trend in recent literature which favors medical treatments This procedure is easy to perform on a day care basis, provides quick pain relief, rapid convalescence high rate of healing and a quick return to normal life with only minimal side effects as well as low risk of incontinence.

STAPLED HEMORRHOIDECTOMY FOR THE TREATMENT OF HEMORRHOIDS

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BACKGROUND: Stapled hemorrhoidectomy or PPH has become a widely accepted procedure for symptomatic hemorrhoids as a radical alternative to surgical treatment of hemorrhoids. **METHODS:** We herein present our experience in stapled hemorrhoidectomy, evaluating results in terms of operative time, postoperative pain, complications, hospital stay, return to normal activity and patient satisfaction. **RESULTS:** In the last four years PPH was performed using a circular stapler in 172 patients with hemorrhoidal disease. Most suffered from anal bleeding with grade 3 prolapse of hemorrhoids (75%). Average operative time was 26 minutes (range 10 to 80 min.). Intra-operative problems were minor, additional suture or coagulation was required in a few patients. Four patients underwent revision and hemostasis within 24 hours for continuous active bleeding. Most of the patients were treated post-operatively with intramuscular analgesics (1-3) converted to oral analgesics on the second day. Three patients (1.7%) suffered from severe pain due to application of the stapler below the dentate line. We observed a high rate of urinary retention (15%) particularly in patients undergoing general anesthesia (73%). In 129 patients (75%) the hospital stay was less than 24 hours. Of 112 patients (65%) surveyed by telephone, 39% returned to work during the first post-operative week, and 53.5% within two weeks. Ninety-one (81%) patients expressed satisfaction with the procedure, 16 noting moderate satisfaction. **CONCLUSION:** With proper selection of patients, adequate stapling technique, stapled hemorrhoidectomy can be considered safe and is well accepted by both patients and surgeons.

SHORT-TERM RESULTS OF MULTIPLE-SESSION PHENOL INJECTION SCLEROTHERAPY FOR HEMORRHOIDS IN PATIENTS WITH COAGULOPATHY

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PURPOSE: The aim of our study was to assess the short to medium-term outcome following multiple session injection sclerotherapy for symptomatic (bleeding) hemorrhoids in patients treated by oral anticoagulants and/or aspirin or known coagulopathies.

METHODS: Data on 39 (27male and 13 female) patients who had sclerotherapy for bleeding hemorrhoids were retrieved retrospectively dating between January 2000 and July 2004. The median age was 73 (40-91). All these patients were treated either by oral anticoagulants (13) , aspirin (21) or suffered from coagulopathies (5). The initial sclerotherapy included three consecutive (3 x 2 ml) phenol 5% injections. The short term outcome was assessed at 4 months and the median-term outcome at 12 months after the first injection. The outcome measures were recorded as: recurrent bleeding, perianal pain and pelvic infection or abscess.

RESULTS: At short-term 87.3% were cured, 10.2% were improved, and 2.5% required surgical intervention. At median-term 5 of 34 patients that were re-examined, had recurrent bleeding that was controlled with re-sclerotherapy. There were no infectious complications.

CONCLUSION: Bleeding hemorrhoids in patients with bleeding diathesis can be safely treated with phenol injection sclerotherapy.

DOPPLER GUIDED TRANSANAL HAEMORRHOIDAL DEARTERIALISATION FOR THE TREATMENT OF SYMPTOMATIC HAEMORRHOIDS

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Introduction: Conventional surgical treatment for haemorrhoids includes ligation of the haemorrhoidal pedicles and excision of the piles. Transanal hemorrhoidal dearterialisation (THD) consists simply of ligation of the distal branches of the rectal arteries, resulting in a reduction of blood flow and decongestion of the haemorrhoidal plexus. The aim of the study was to assess the efficacy and safety of doppler guided THD for the treatment of second and third degree haemorrhoids.

Methods: All patients with second degree haemorrhoids who had failed to respond to conservative treatment and/or sclerotherapy and all patients with third degree haemorrhoids were offered THD. The procedure was carried out under general anaesthesia as a day case using a disposable proctoscope, specifically designed for this purpose. The proctoscope has on its right side a small channel for the insertion of a fine doppler probe. Just distal to the tip of the doppler probe there is a small window to allow suturing of the rectal mucosa 2 cm above the dentate line. With a clockwise rotation of the proctoscope, the doppler probe was used to accurately locate all the terminal branches of the haemorrhoidal arteries, which were then sutured one by one with a 2/0 absorbable stitch mounted on a 5/8 needle. Patients were followed-up at 1 week, 2 months and every 6 months thereafter. **Results:** From January 2000 to September 2003, 170 patients (92female; mean age 53) underwent this procedure. The number of arteries identified varied from 3 to 6 per patient. In the immediate postoperative period no severe pain was reported and all patients returned to work within three days. 147 patients were followed-up for a minimum of 2 months (mean follow-up 2 months), including 81 second degree and 89 third degree haemorrhoids. In 138 (93,8%) patients the operation completely resolved or markedly improved the symptoms. In the 9 patients with failure (7 second degree and 2 third degree) repeat doppler showed at least one residual artery. Six of these 9 patients underwent further THD, which was successful in all cases. There were 10 postoperative complications (2 PR bleeds, 3 thrombosed piles, 2 submucosal rectal haematoma, 2 anal fissures, 1 urinary retention). One postoperative bleeding required suturing of the bleeding site under anaesthesia; all other complications were managed conservatively.

Discussion: THD is a safe and effective procedure. With minimal postoperative pain and quick recovery THD has the potential to become the treatment of choice for second and third degree haemorrhoids.

Laparoscopic repair of Morgagni's hernia

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Background: Morgagni's hernia is a congenital retrosternal diaphragmatic hernia. It is uncommon entity, representing usually small anterior defect. The condition is often asymptomatic and incidentally diagnosed. Traditionally, hernia of Morgagni was treated by open transabdominal or transthoracic approach with or without use of prosthetic material. Recently laparoscopy offers convenient and safe repair but consensus is still lacking about the optimal laparoscopic technique.

Case description: A 55 year-old woman was admitted and treated successfully for calculouse cholangitis by antibiotics and Endoscopic papillotomy. Chest X-ray revealed the shadow closed to the heart silueth, which was interpreted as pericardial fat pad. One month late, during the dilated laparoscopic cholecystectomy, a large retrosternal diaphragmatic hernia with greater omentum within the sac surprisingly discovered. Lacking formal consent, we did not proceed with the hernia. Few weeks later, after performing additional work-up, we operated on her laparoscopically, excised the sac of the hernia and closed the defect by intracorporeal suture technique. Presented Video depicts the details of the procedure.

Conclusions: Laparoscopy offers convenient and safe approach for treating of Morgagni's hernia.

LAPAROSCOPIC HAND ASSISTED SPLENECTOMY FOR MASSIVE SPLENOMEGALY

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The Laparoscopic technique was show to be excellent for normal size spleens, in massive splenomegaly, this technique is still debateful due to the technical difficulties.

We present in this video our technique of hand assisted splenectomy for very large spleen.

LAPAROSCOPIC EXCISION OF PANCREATIC NEUROENDOCRINE TUMOR

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AIMS: to evaluate the benefit of laparoscopy in excision of pancreatic neuroendocrine tumors (PNET).

METHODS: Two patients with PNET were operated on. One patient with a symptomatic insulinoma in the body of the pancreas, and the second patient with a non functional PNET in the head of the pancreas. In both of them laparoscopic excision of the PNET was carried out.

RESULTS: A preoperative localization of both PNET was achieved by CT angio and EUS. Blood tests confirmed the diagnosis of insulinoma in the first case and a non functional tumor in the second patient. Intra operative US was performed, and laparoscopic enucleation was carried out in both patients.

The 2 operations were uneventful. The post operative course was uneventful for the patient with the non functioning PNET , while the patient with the insulinoma developed a low output pancreatic fistula which took almost two months to close, however the clinical signs of the hypoglycemia were corrected immediately during the operation.

CONCLUSIONS: laparoscopic excision of PNET is feasible and adequate treatment for PNET. One should remember however that pancreatic fistula occurs in almost 30% of patient undergoing laparoscopic excision of these type of neoplasms.

LAPAROSCOPIC EXCISION OF A HUGE ADRENAL CYSTIC LESION

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A 25 year old otherwise healthy female presented with LUQ abdominal pain, early satiety and slight weight loss for the last year. CT scan revealed an 8 cm simple cyst in the left upper abdomen arising either from the tail of the pancreas or the left adrenal gland. Laparoscopy showed the cyst to be located within or protruding into the lesser sac between the spleen, the stomach and the splenic flexure. Meticulous dissection showed the cyst to arise from the left adrenal gland. Using various the 5 mm Ligasure and stapling devices, the cyst was entirely excised while preserving the adrenal gland. The operative and post operative courses were unremarkable. Pathology report showed the lesion to be an adrenal pseudocyst with no epithelial lining.

LAPAROSCOPIC TECHNIQUE OF URETEROLYSIS IN AN IDIOPATHIC RETROPERITONEAL FIBROSIS (VIDEO)

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Introduction and objectives: The gross appearance of retroperitoneal fibrosis or auto-allergic periaortitis is that of a smooth, flat, dense mass that envelops the surrounding structures and can invade the ureter or psoas muscle, fibrosis has led to significant ureteral obstruction. Recently, successful laparoscopic ureterolysis reported.

Materials & methods: Technique of left laparoscopic ureterolysis in a 50 years old man, presented with severe hydronephrosis due to a centrally located, soft tissue mass encasing the bifurcation of great vessels mostly on left side and same side ureter, demonstrated on CT scan.

PCN inserted, and conic left ureteral stenosis at level L5 an antegrade urethrography revealed; procedure finished by ureteral DJ stent insertion. Due to recurrent UTI's, patient's low tolerability to issue of indwelling stent and nephrostomy for long standing conservative treatment and importance of multiple biopsies to exclude malignancy, problematic nearby great vessels, laparoscopic approach choused for surgical treatment.

Using a three-port technique, the iliac vessels and ureter was dissected and mobilized. Then ureter intraperitonealized by transposing and reapproximating the cut peritoneal edges behind it. DJ stent aid for ureteral identification. Fibrotic tissue, surrounded the ureter and great vessels, dissected for the hystologic examination: the benign nature of the disease confirmed. No ureterotomies occurred during dissection, stent removed 3 weeks after surgery.

Results: Six month post surgery contrast study control revealed no evidence of obstruction.

Conclusion: laparoscopic approach for ureterolysis for RPF is preferred as a minimal invasive and safe treatment and with more experience, can replace the open procedure.

LAPAROSCOPIC TREATMENT OF ENTEROVESICAL FISTULA

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Introduction: Enterovesical fistula is a disease than cause by inflammatory bowel disease, cancer and diverticulitis. It appears as recurrent urinary tract infection with signs of fecaluria and pneumatouria. Sigma is part of large bowel which is affected more often. Treatment options are includes open surgery and laparoscopic approach. We present a **video** of laparoscopic sigmoidectomy with closure of bladder wall defect.

Materials and Methods: A 57 years male admitted on our department with pneumatouria and fecaluria. In the past suffered from recurrent UTI and diverticulitis exacerbation. Evaluation was performed and include cystoscopy, abdominal CT, and barium enema. Fistula was diagnosed by CT (air bubbles present in the bladder).

Results: Operation was include segment separation of sigmoid colon from bladder wall, resection, reanastomosis and closure of bladder wall defect.The operation lasted 180 minute without complication in postoperative period.

Conclusion: Laparoscopic sigmoidectomy safety method for this pathology allowed perform bowel resection and anastomosis via mini invasive approach.