



**הכנס השנתי ה-26 של איגוד הכירורגים בישראל
הכנס בסימן "דור אחרי"
(השינויים בכירורגיה במשך 25 שנים)**

29 במאי, 2008, מרכז הכנסים הבינלאומי אשקלון

תכנית ותקצירים

החברה המארגנת
חברת טרגט כנסים בע"מ
ת.ד. 29041, תל-אביב 61290
טל: 03-5175150, פקס: 03-5175155
דוא"ל: target@targetconf.com

ועדה מארגנת

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מיכאל קראוס, מרכז רפואי רמב"ם, חיפה
אברהם ריבקינד, מרכז רפואי הדסה עין-כרם, י-ם

ועדה מדעית

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מוצרים

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פקס: 04-6370053

תכנית

08:00 התכנסות, רישום וסיור בתערוכה

מושב פתיחה 09:00 - 09:30

09:00 ברכות
מיכאל קראוס, יו"ר איגוד הכירורגים בישראל
שמעון שרף, מנהל המרכז הרפואי ברזילי
רוני מהצרי, ראש העיר אשקלון
בוריס יופה, יו"ר הכנס

מושב I - כירורגיה דחופה 09:30 - 10:30

יו"ר: ריקרדו אלפיסי, מח' כירורגית ב', המרכז הרפואי הלל יפה, חדרה

09:30 בטן פתוחה
גדי שקד, מח' כירורגית ב' ויח' הטראומה, המרכז הרפואי סורוקה, באר-שבע

10:00 חידושים בפצעים חודרים בבטן
אברהם ריבקינד, מח' כירורגיה כללית, המרכז הרפואי הדסה עין-כרם, ירושלים



10:30 הפסקת קפה, עיון בפוסטרים וסיור בתערוכה

מושב II - דימום מדרכי העיכול 11:00 - 12:00

יו"ר: יוסף קלאוזנר, מח' כירורגית ב', המרכז הרפואי ת"א ע"ש סוראסקי,
תל-אביב

11:00 אנטרוסקופיה
שמעון בר מאיר, המכון הגסטרואנטרולוגי, המרכז הרפואי שיבא, תל השומר

11:20 קפסולה - בירור דימום מדרכי העיכול
צבי פיירמן, המכון הגסטרואנטרולוגי, המרכז הרפואי הלל יפה, חדרה

11:40 CT אנגיו - בירור דימום
ליאור קופל, מח' הרנטגן, המרכז הרפואי אסף הרופא, צריפין

תכנית (המשך)

13:00 - 12:00	ישיבה פרופסיונאלית
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13:00	MESENTERIC ISCHEMIA Dr. Helge Fasting, Denmark
13:30	ארוחת צהרים, עיון בפוסטרים וסיור בתערוכה

16:00 - 14:30	מושב III - חינוך כירורגי
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14:30	תולדות החינוך הכירורגי משה פויכטונגר
15:15	חינוך כירורגי הרב פרוינד , מח' כירורגית, בית החולים האוניברסיטאי הדסה הר הצופים, ירושלים
16:00	הפסקת קפה, עיון בפוסטרים וסיור בתערוכה

18:00 - 16:30	מושב IV - כירורגיה זעיר פולשנית
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16:30	פרתירואיד מיכאל קראוס , יו"ר איגוד הכירורגים; מח' כירורגית א', המרכז הרפואי רמב"ם, חיפה
16:50	השמנת יתר סובחי אבו-עביד , היח' הלפרוסקופית, המרכז הרפואי ת"א ע"ש סוראסקי, תל-אביב
17:10	לפרוסקופיה מחיר הקידום (סיבוכים) ועקומת למידה עמיר סולד , היחידה ללפרוסקופיה, המרכז הרפואי ת"א ע"ש סוראסקי, תל-אביב
17:30	ניתוחי קולון השוואה בין ניתוחים סגורים לפתוחים וההתפתחות בשנים האחרונות יחיאל זיו , החטיבה הכירורגית, המרכז הרפואי אסף הרופא, צריפין
17:50	דיון
18:00	נעילת הכנס ונסיעה לשדרות

תכנית (המשך)

19:00 הענקת פרסים לפוסטרים מצטיינים ע"י ועדת פוסטרים
הרצאת אורח
ADVENTURES
Dr. Helge Fasting, Denmark

20:00 ארוחת ערב חגיגית בשדרות

POSTER PRESENTATIONS

Board No.

1. PREEMPTIVE REGIONAL ANALGESIA IN UMBILICAL HERNIA REPAIR, IS IT REALLY IMPORTANT?
R. Bilik, W. Kohn
Dept. of Pediatric surgery The Safra's Children Hospital, H. Sheba Medical Center and Assuta Medical Center The Sackler School of Medicine Tel-Aviv University, Israel
2. EFFECTS OF NOVEL ANTIDIURETIC HORMONE RECEPTOR ANTAGONISTS ON RENAL FUNCTION AND CARDIAC HYPERTROPHY IN RATS WITH EXPERIMENTAL CONGESTIVE HEART FAILURE
B. Bishara¹, T. Karram², H. Sheikh³, A. Hoffman², J. Winaver³, Z. Abassi^{2,3}
¹Dept. of General Surgery-A, ²Dept. of Vascular Surgery and Kidney Transplantation, Rambam Medical Center, ³Dept. of Physiology and Biophysics, Faculty of Medicine, Technion, Haifa, Israel
3. ADVERSE EFFECTS OF PNEUMOPERITONEUM ON RENAL FUNCTION: INVOLVEMENT OF THE NITRIC OXIDE AND ENDOTHELIN SYSTEMS
B. Bishara¹, T. Karram², S. Khatib³, J. Winaver⁴, Z. Abassi^{2,4}, A. Hoffman²
¹General Surgery "A", ²Vascular Surgery and kidney transplantation, Rambam, ³Dept. of Anesthesiology, Human Health Care Campus, Haifa, and ⁴Dept. of Physiology and Biophysics, Ruth & Bruce Rappaport Faculty of Medicine, Technion, Haifa, Israel
4. OVEREXPRESSION OF SKP2 IS ASSOCIATED WITH RESISTANCE TO PREOPERATIVE ADRIAMYCIN-BASED CHEMOTHERAPY IN PRIMARY BREAST CANCER
S. Davidovich¹, O. Ben-Izhak², M. Shapira¹, B. Futerman³, D. Hershko^{1,4}
Depts. of Surgery A ¹ and Pathology ², Unit of Clinical Epidemiology³ and Breast Health Institute ⁴, Rambam Medical Center and the Technion - Israel Institute of Technology, Haifa, Israel
5. DIRECT HERPES SIMPLEX VIRUS 1 (HSV-1) DELIVERY INTO RECTAL ADENOCARCINOMA IN MICE RESULTS IN AN EFFICIENT ANTI-TUMOR EFFECT
Y. Edden¹, D. Kolodkin-Gal², G. Zamir¹, E. Pikarsky³, A. Panet², Pikarsky A.J.¹
¹Dept. of General Surgery, Hadassah Hebrew University Medical Center, Jerusalem¹, Dept. of Virology, Hebrew University - Hadassah Medical School, Jerusalem, Dept. of Pathology, Hadassah Hebrew University Medical Center, Jerusalem, Israel³
6. PRIMARY REPAIR OF PERINEAL TEARS. THIRTY NINE MONTHS FOLLOW UP ON 23 WOMEN
Y. Edden¹, N. Laufer², T. Hadar¹, N. Shussman¹, Z. Gimmon¹, A.I. Rivkind¹, A.J. Pikarsky¹
Dept. of General Surgery¹, Dept. of Obstetrics and Gynecology, Hadassah Hebrew University Medical Center Jerusalem, Israel
7. LAPAROSCOPIC REVISIONAL BARIATRIC OPERATIONS - LESSONS LEARNED IN 19 PATIENTS
R. Elazary, A.I. Rivkind, A. Keidar
General Surgery Dept., Hadassah-Hebrew University Medical Center, Ein-Kerem, Jerusalem, Israel

POSTER PRESENTATIONS (cont.)

Board No.

8. LAFAET COLON RESECTION FOR TUMORS OF THE COLON
A. Ferdman¹, S. Argov²
¹Laniado Hospital Netanya, Leumit H. F., ²Elisha Medical Center, Israel
9. THE VALUE OF LOW DOSE 99MTC-SESTAMIBI SPECT/CT IN PRESURGICAL ASSESSMENT OF PARATHYROID ADENOMAS
H. Gavriel¹, R. Gold Deutsh², N. Poluksht², H. Golan³, A. Halevy²
¹Dept. of Otolaryngology, Head and Neck Surgery, ²Dept. of Surgery, ³Nuclear Medicine Dept., Assaf Harofeh Medical Center, Affiliated to Sackler Faculty of Medicine, Tel Aviv University, Israel
10. CAROTID BODY TUMORS: A SINGLE DEPARTMENT'S EXPERIENCE
T. Hadar¹, C. Rubinstein², Y. Edden¹, R. Al-Husseini², K. Meir³, I. Akopnick², H. Anner², Y. Berlatzky²
¹Dept. of General Surgery, ²Dept. of Vascular Surgery, ³Dept. of Pathology, Hadassah Hebrew University Medical Center, Jerusalem, Israel
11. ANDOMIZED PROSPECTIVE TRIAL: HEMODYNAMICS AND RENAL FUNCTION WITH RESTRICTIVE OR LIBERAL INTRAOPERATIVE FLUIDS IN LAPAROSCOPIC BARIATRIC SURGERY
A. Keidar¹, R. Paskaleva², R. Elazary¹, A. Rivkind¹, K. Cohen², I. Matot²
¹Dept. of General Surgery and Trauma Unit, ²Dept. of Anesthesia, Hadassah Medical Center, Ein Karem, Jerusalem, Israel
12. LAPAROSCOPIC REPAIR OF LEFT PARADUODENAL HERNIA
A. Khalailah, M. Bala, S. Abugazala, A.I Rivkind, Y. Mintz
Dept. of Surgery, Hadassah-Hebrew University Medical Center, Jerusalem, Israel
13. SELECTIVE VENOUS SAMPLING ENABLES MINIMALLY INVASIVE PARATHYROIDECTOMY IN PATIENTS WITH NEGATIVE PREOPERATIVE LOCALIZATION STUDIES
M.M. Krausz, S. Ish-Shalom, E. Segal, A. Ofer, A. Engel, M. Mekel
Dept. of Surgery A, Metabolic Bone Disease Unit, Invasive Radiology Unit Rambam Medical Center, Technion-Israel Institute of Technology, Haifa, Israel
14. GENDER DIFFERENCES IN THE RESPONSE TO ABDOMINAL COMPARTMENT SYNDROME IN RATS
A. Mahajna¹, E. Gleizarov², L. Saminichin¹, D.E. Dar¹, M.M. Krausz¹
¹Dept. of Surgery A, ²Urology, Laboratory of Shock and Trauma Research, Rambam Medical center and The Bruce Rappaport Faculty of Medicine, Technion - Israel Institute of Technology, Haifa, Israel
15. DO WE NEED INTERVAL APPENDECTOMY?
N. Nasra, I. Shaikis, A. Glushko, I. Markovich, S. Selbak, S. Tepliski, B. Boruk, M. Qarawany, A. Nickola, M. Zilberman, B. Eitan, N. Geron
The Baruch Padeh Medical Center, Poriya, Israel
16. LIVER TRANSPLANTATION FOR HEPATOCELLULAR CARCINOMA - THE HADASSAH MEDICAL CENTER EXPERIENCE
I. Nir¹, G. Zamir¹, I. Levi², O. Shibolet², A. Eid¹
¹Depts. of Surgery, ²Medicine, Organ Transplantation unit, Hadassah Hebrew University Hospital, Ein-Kerem, Jerusalem, Israel

POSTER PRESENTATIONS (cont.)

Board No.

17. SATISFACTION LEVEL, QUALITY OF LIFE, LEISURE TIME OF RESIDENTS AT THE SOROKA UNIVERSITY MEDICAL CENTER, BE'ER SHEVA, ISRAEL
A. Acker¹, **Z.H. Perry**², H. Reuveni³, A. Toker⁴
¹Orthopedic Department, Soroka University Medical Center; ² Surgery A Dept., Soroka University Medical Center & The Epidemiology Dept., Goldman Medical School, Ben-Gurion University; ³Pediatric Division, Soroka University Medical Center, Dept. of Health Systems Management, Goldman Medical School, Ben-Gurion University; ⁴Pediatric Division, Hadasaa University Medical Center
18. FATIGUE IN MEDICAL RESIDENTS - THE SUMC EXPERIENCE
Y. Pruchtman¹, A.M. Moser², **Z.H. Perry**³
¹PediatricS Division, Soroka University Medical Center; ²PediatricS Division, Soroka University Medical Center, ³Surgery A Dept, Soroka University Medical Center & The Moshe Prywes Center for Medical Education, Faculty of Health Sciences, Ben Gurion University of the Negev, Beer Sheva, Israel
19. ONVEYING BAD NEWS - UPON THE ATTITUDES OF PRIMARY CARE PHYSICIANS AND THEIR PATIENTS
A. Rosenblatt¹, **Z.H. Perry**², A. Biderman³
¹Medical Student, The Goldman Medical School, Ben-Gurion University; ²Surgery A Dept., Soroka University Medical Center & The Epidemiology Dept., Goldman Medical School, Ben-Gurion University; ³The Faculty of Health Sciences, Division of Health in the Community, Ben-Gurion University, Beer Sheva, Israel
20. LAPAROSCOPIC RESECTION OF INTESTINAL CARCINOID TUMORS
P. Reissman, D. Gross
Dept. of Surgery, Shaare-Zedek Medical Center, and Endocrinology and Metabolism Service, Dept. of Medicine, Hadassah-Hebrew University Medical Center. Affiliated to the Faculty of Medicine, Hebrew University, Jerusalem, Israel
21. HAND ASSISTED LAPAROSCOPIC SURGERY (HALS) FOR LIVER TUMORS
Y. Salit, R. Haddad, O. Lefel, A. Chami, A. Bitterman
Dept. of surgery A, Carmel Medical Center, Haifa, Israel
22. HAND-ASSISTED LAPAROSCOPIC SURGERY (HALS) FOR COLON RESECTION
Y. Salit, O. Lefel, A. Chami, R. Haddad, A. Bitterman
Dept. of surgery A - Carmel Medical Center- Haifa, Israel
23. METABOLIC AND ELECTROLYTE CHANGES IN PATIENTS THAT UNDERGO MECHANICAL BOWEL PREPARATION
Z. Shapira, L. Feldman, R. Lavy, Y. Waisgarten, A. Halevy
Surgery Division and Nephrology Unit, Assaf-Harofeh Medical Center, Zrifin, Israel
24. LAPAROSCOPIC SLEEVE GASTRECTOMY AS A TREATMENT FOR WEIGHT LOSS IN MORBID OBESITY: TECHNIQUE AND SHORT-TERM OUTCOME
D. Shteinberg, N. Slijper, D. Keren, I. Matter
Bnai-Zion Hospital, Haifa

POSTER PRESENTATIONS (cont.)

Board No.

25. BIOLOGIC FOREIGN BODY PLUG FOR COMPLEX PERIANAL FISTULA - OUR INITIAL EXPERIENCE
N. Shussman, Y. Edden, A.J. Pikarsky
Dept. of General Surgery, Hadassah Hebrew University Medical Center, Jerusalem, Israel
26. LAPAROSCOPIC ADRENALECTOMY FOR CUSHING'S SYNDROME DURING 3RD TRIMESTER OF PREGNANCY
N. Slijper¹, D. Shteinberg¹, G. Dikshtein², I. Matter¹
¹Surgical Dept., ²Endocrinology, Bnai-Zion Medical Center, Haifa, Israel
27. NISSEN FUNDOPLICATION FOR GASTRO ESOPHAGIAL REFLUX IN THE NORMAL AND NEUROLOGICAL IMPAIRED PEDIATRIC POPULATION
H. Tizian, R. Bilik, D. Shinhar, I. Avigad, B. Wais, Y. Boyanover
Dept. of Pediatric Surgery and the Gastroenterology Service, Safra's Children Hospital, Sheba Medical Center, Tel-Hashomer, Israel
28. LYMPHOCYTIC INFILTRATION AS A PROGNOSTIC FACTOR IN HIGH GRADE INFILTRATING CARCINOMA OF THE BREAST
G. Tolstov¹, B. Chikman¹, R. Lavy¹, A. Halevy¹, J. Zandbank²
¹Dept. of Surgery, ²Institute of Pathology, Assaf Harofeh Medical Center, Affiliated to Sackler Faculty of Medicine, Tel Aviv University, Israel

תקצירים

DOUBLE BALLOON ENTEROSCOPY- ISRAELI EXPERIENCE

Bar-Meir S, Nadler M

Department of Gastroenterology, Chaim Sheba Medical Center and Sackler School of Medicine, Tel Aviv University

Double balloon enteroscopy (DBE) is a new endoscopic technique to visualize the entire small bowel and to perform biopsies and other therapeutic procedures

Aim: to describe the Israeli experience with DBE

Methods: Patients with suspected small bowel pathology who underwent DBE.

Results: from February 2007 until April 2008, 79 procedures were done in 68 patients (42 male, 26 female). Forty two patients underwent the procedure via the oral route, 16 via anal route, 9 via both routes and one underwent 3 procedures. DBE was diagnostic and therapeutic in 33 procedures (41.7%): Small bowel polypectomy in 11, AVM ablation in 7, small bowel biopsies in 14 and dentures extraction in 1 patient. One patient developed post polypectomy syndrome and was treated conservatively.

Conclusion: DBE is an efficient and safe diagnostic and therapeutic tool for the diagnosis and therapy of small bowel pathologies.

OBSCURE GASTROINTESTINAL BLEEDING-THE ROLE OF CAPSULE ENDOSCOPY

Zvi Fireman

Department of Gastroenterology, Hillel Yaffe Medical Center, Hadera, affiliated to the Bruce Rappaport Faculty of Medicine, The Technion, Haifa, Israel

Obscure gastrointestinal bleeding (OGIB) is defined as bleeding of unknown origin that persists or recurs following a negative initial endoscopic evaluation. The source of bleeding remains unidentified in ~10% of these patients. Since 2001, with the appearance of capsule endoscopy, CE has altered the management of patients with OGIB through its ability to directly image the small bowel mucosa. CE is effective in detecting small-bowel lesions in patients with OGIB. Published studies have revealed a numerically superior performance of CE in determining a source of OGIB compared to other modalities

The aims of this lecture will review:

- The yield of small bowel findings with CE in patients with OGIB as compared to other imaging modalities including small bowel barium radiography, push enteroscopy, and CT imaging (based on meta-analysis).
- The impact of CE on the management and outcomes of patients with OGIB The few comparison studies published, CE vs. intra-operative endoscopy and double balloon enteroscopy
- The American Society for Gastrointestinal Endoscopy (ESGE) recommendation
- Algorithm of evaluation OGIB and unexplained iron deficiency anemia (IDA), namely *occult* vs. *overt* gastrointestinal bleeding

In summary; CE has its highest diagnostic yield in patients with obscure GI bleeding and so it should be performed early on in the workup of patients who have negative upper and lower endoscopic results.

INVESTIGATION OF INTRA-ABDOMINAL BLEEDING BY MDCT

Lior Copel

Head of Imaging Unit, Department of Radiology, Assaf Harofeh Medical Center, Zerifin

Affiliated to Sackler School of Medicine, Tel Aviv University

Intra-abdominal bleeding is a common cause of hospitalization, morbidity and mortality the western world. The numerous etiologies of intra-abdominal bleeding require multi-specialty approach for detection and treatment of these patients. Often, the evaluation of intra-abdominal bleeding is complex and requires multiple imaging modalities and techniques (endoscopy, nuclear scintigraphy and invasive angiography). In recent years technological advances have allowed the development of a new generation of CT scanners. With 16 to 64-slices multi-detector CT (MDCT), a volumetric acquisition of the abdomen is feasible with sub-millimeter slices in less than 10 seconds. These scanners have better spatial and contrast resolution than the older generations of MDCT. With rapid acquisition, the contrast material can be "chased" and multi-phase CT (arterial, portal, venous and delayed scans) can be performed in the same patient with a single injection of contrast material.

Multi-phase CT is an available, non-invasive diagnostic technique which is easy and rapid to perform. Experience with MDCT for intra-abdominal bleeding shows it to be a promising first-line modality, sensitive and accurate for the detection of the location and the etiology of bleeding. It may also provide information for improved interventional and surgical planning.

In this presentation, the role of MDCT for investigation of gastro-intestinal tract, hepato-biliary and splenic bleeding will be discussed. Special emphasis will be given on MDCT protocols adjusted for these purposes.

CHRONIC INTESTINAL ISCHAEMIA: DIAGNOSES AND TREATMENT. SPECIALLY FOCUS ON SPLANCHNIC BLOOD FLOW

Helle D. Sacho¹, Jan Abrhamsen¹, Helge Fasting²

¹Department of Clinical Physiology, ²Department of Vascular Surgery, Viborg County Hospital, Denmark

Chronic intestinal ischaemia is a relatively rare but very important clinical entity, which is caused by a reduction in the splanchnic blood flow, most often because of atherosclerosis. Intestinal angina is postprandial abdominal pain developing when the genuine and collateral vessels no longer are able to accommodate the postprandial increasing demand from the gastrointestinal tract and the liver. In addition, the clinical picture very often includes sitophobia and weight loss. In daily clinical practise, conventional angiography is considered as the golden standard, but ultra sonography, computerized tomography and magnetic resonance angiography are gaining momentum when investigating for chronic intestinal ischaemia. These methods depend on imaging of the stenotic vessels not taking into consideration the possibility of sufficient splanchnic perfusion in spite of severely or occluded vessels. Only a few papers address the physiological consequence of stenotic or occluded vessels- the lack of postprandial increase in splanchnic blood flow.

SURGICAL EDUCATION

Moshe M. Feuchtwanger

Dedicated to the blessed memory of the late Prof. N. J. Saltz (1912-2003) surgical education is based upon the surgical resident's qualities, his motivation, tutorial background, and his preparedness to fully utilize the opportunity to acquire maximal surgical knowledge and capabilities offered to him by the best available institutions for surgical education by accepted, applicable, and highly qualitative criteria.

From the prehistoric era through Indian, Egyptian, Byzantine, Greek, Roman, and Spanish applied surgery through the Middle Ages and the Renaissance, enormous progress in surgery was gradually generated, unfortunately stimulated by the need for treatment due to violence and warfare. Autodidacts and unlearned practitioners carried out surgical procedures until European schools began to influence surgical practice through barber-surgeons and apprentices,—subsequently followed by the passage into the era of surgery based on scientific developments.

This change from practitioner apprenticeship to specialization and accreditation was striking, and was expressed by the acknowledgement of scientific institutions of surgical learning, professional societies, and modern governmental systems. These became the accepted trustees of systematic, quality-controlled surgical education. The intimate interaction between educator, trainee and the devotion and perseverance of unlimited exposure time according to the need are the basis for granting surgical qualifications, inclusive of cognitive knowledge, executive properties, and professional behavior through maximal use of all capabilities and humane qualities—rendering highly qualified surgical care to the surgical patient and respect for the surgical professional standing and one's surgical colleagues.

Education is more than merely learning; it cannot be successfully achieved by preaching as opposed to personal example and performance and the presence of the educator in all phases of the disciple's development. It cannot be achieved by remote control or in a virtual world.

In surgical education, the British saying “presence is service” still counts and it is as applicable as ever in the daily requirement of the surgical educator.

SURGICAL EDUCATION

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The changes occurring in general surgery in recent years will be presented. Discussed will be solutions suggested in Europe and the USA and their possible application in Israel, in particular the shift from service to education in residency training

ADVANCES IN PARATHYROID SURGERY IN THE LAST 25 YEARS

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The first parathyroidectomy for primary hyperparathyroidism (PHPT) was performed in a 38 year-old man by Felix Mandl in Vienna in 1935. The treatment of choice for PHPT has been for many years thereafter a bilateral neck exploration, identification of the 4 parathyroid glands, and resection of the enlarged glands confirmed by intraoperative histological examination. This procedure had a success rate of >95%, complication rate of <2%, hospitalization of <2 days, and mortality rate of 0% when performed by a qualified surgeon. Any new surgical procedure had to be as good, or better than this "gold standard". Minimal invasive parathyroidectomy (MIP) for parathyroid adenoma was introduced by GL Irvine in 1993. This included preoperative localization of the adenoma by a Tc-99m sestamibi SPECT scan and cervical ultrasound and intraoperative parathyroid hormone (PTH) measurement by a "Turbo" PTH assay which can be completed in 10 minutes with a sensitivity of 96%, specificity of 100% and positive predictive value of 97%.

The advantages of MIP are: shorter operative time, smaller incision, local anesthesia, less pain, less hematoma, less dissection, reduced risk of recurrent laryngeal nerve injury, less postoperative hypocalcemia, and no exploration of contralateral structures. Limitations of MIP are: an intrinsic rate of 15% of multiglandular disease, conversion rate to bilateral exploration in 10-30%, cost of "Turbo" PTH, sestamibi scan and ultrasound. Our novel experience in a group of 45 patients in which preoperative PTH Selective Venous Sampling, performed in sestamibi negative patients, enabled MIP in 62% of these patients who would otherwise have undergone bilateral neck exploration, is described.

Our over whole success rate in 412 patients with primary hyperparathyroidism was 97.4%. Minimal invasive parathyroidectomy was performed in 91.2% of the patients, with a conversion rate of 4.8%. In 91 patients MIP was performed under local anesthesia. Video-assisted MIP was performed in 9 patients.

Several other procedures have been lately introduced for treatment of PHPT including Intraoperative Radioguided MIP utilizing a hand held gamma probe, totally endoscopic MIP, Intraoperative PTH sampling, as well as non-operative ablation by angiography and embolization, and by ultrasound guided alcohol ablation.

Medical treatment by calcimimetic agents (Cinacalcet) which activate the calcium receptors on the parathyroid gland and thereby decrease the secretion of PTH, are currently used for borderline disease, end-stage renal failure and parathyroid carcinoma

MORBID OBESITY -THE DISEASE AND ENDOSCOPIC SURGERY

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Morbid Obesity is a major health problem in the western world. More than 60% of the adult population in the USA is overweight. Consequences of being obese include increased morbidity and earlier death. The financial consequences of obesity are large, both individually and to nation as a whole.

Reducing food intake by various behavioral and pharmacological therapeutic strategies has shown limited success in maintaining significant weight loss.

Bariatric surgery can result in sustained weight loss in the long term, as well as striking remission of many obesity related comorbidities for most morbidly obese individuals.

The introduction of endoscopic surgery twenty years ago changed dramatically the operative and post operative course in bariatric surgery. Most primary and revisional operations are performed laparoscopically.

Since the introduction of band operations, a new procedures were added like the sleeve gastrectomy, gastric pacing and modification of gastric bypass.

What will we have in the near future? I believe that we will have: better understanding of obesity as a disease, safer and simpler surgical techniques, to modulate the gastro-hypothalamic axis and better, safer and more effective medications to control hunger

LAPAROSCOPIC VS OPEN SURGERY FOR COLON CANCER, AND RECENT NEW DEVELOPMENTS

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Since its first described case in 1991, laparoscopic colon surgery (LC) has lagged behind other minimally invasive surgical methods in terms of acceptability, dissemination, and ease of learning. In colon cancer, initial concerns over port site metastases, and adequacy of oncologic resection, have considerably dampened early enthusiasm for this procedure. During the years, numerous reports have validated short-term benefits following LC for cancer, including shorter hospital stay, shorter time to recovery of bowel function, and decreased analgesic requirements. In addition, LC for cancer has also been demonstrated to be at least equivalent to traditional laparotomy in terms of adequacy of oncologic resection, disease recurrence, and long-term survival. The data available in the literature do not provide adequate evidence on whether total costs significantly differ between LC and conventional open surgery in the treatment of colonic malignancy. It appears that costs may differ significantly, depending on health care systems and local practices. Barcelona, COSTSG, COLOR, and CLASICC trials have uniformly and consistently shown a significant reduction in the use of narcotics and oral analgesics and length of hospital stay, as well as a faster return of diet and bowel function, with laparoscopic colectomy. Barcelona and COSTSG, have sufficient maturation and follow-up to report recurrence and survival data, and neither have found a survival disadvantage in patients treated with LC. Results of the CLASICC and COLOR trials, as well as 5-year data from the COSTSG trial, should definitively address survival results.

The investigational experience with laparoscopic rectal cancer is not as mature and requires further investigation. The CLASICC trial provides the only available randomized controlled trial data on rectal cancer patients.

LC remains a prohibitively difficult technique to master. Numerous technological innovations have been introduced on to the market in an effort to decrease the steep learning curve associated with LC. Good evidence exists supporting the use of second-generation, sleeveless, hand-assist devices in this context. Similarly, new hemostatic devices such as the ultrasonic scalpel and the electro-thermal bipolar vessel sealer may be particularly helpful for extensive colonic mobilizations, in which several vascular pedicles must be taken. The precise role of these hemostatic technologies has yet to be established, particularly in comparison with stapling devices and significantly cheaper laparoscopic clips. Recent advances in camera systems are promising to improve the ease with which difficult colonic dissections can be performed. Hand-assisted laparotomy colectomy (HALS) is a safe and effective procedure. The data in terms of length of hospital stay and operative time compare favorably with published data for conventional laparoscopic (CL) colectomy. Controlled trials demonstrate that the early benefits of the laparoscopic approach are realized and there may be a shorter learning curve. Most authors found HALS to be a very useful and promising technique. Suitable hand-insertion ports and laparoscopic instruments are crucial. It appears that HALS confers all of the advantages of CL for colectomy, with no obvious drawbacks. The use of Robotic surgery for colon cancer is another recently developed method which requires further investigation. Colorectal NOTES surgeries are under investigation in the laboratory.

פוסטרים

PREEMPTIVE REGIONAL ANALGESIA IN UMBILICAL HERNIA REPAIR, IS IT REALLY IMPORTANT?

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The value of preemptive regional analgesia during umbilical hernia repair was studied regarding hemodynamic stability and abdominal wall relaxation. Patients were divided into 3 groups. Group A (20 patients) received bilateral subcostal regional infiltration combined with periumbilical infiltration. Group B (20 patients) received bilateral intra rectus abdominis muscle infiltration with periumbilical infiltration. Control group received periumbilical infiltration analgesia at surgery end. Preemptive analgesia was applied in group A and B 11.15±2.3minutes prior to surgery start. Level of general anesthesia (MAC=2.8), and surgical technique were identical in all groups. Heart rate (HR), blood pressure (BP), respiratory rate (RR) and abdominal wall relaxation (AWR) were recorded before surgery (base line observation-BLO) and at five additional observation points (OP) through surgery. Patient's age, sex and weight were not significantly different between the groups. A significant raise regarding HR was noted between BLO and all OP within all groups.

HR	<u>Control</u>	<u>Group A</u>	<u>Group B</u>
OP3-BLO Mean(S.E.)	39.6(4.44)**	5.45(2.07)**	3.85(1.31)**

**=p<0.01

The respiratory rate during surgery remained unchanged in group A and B Vs significant raise in the control group (p<0.01).

Systolic pressure, HR and RR at different OP, show significant raise in the control group Vs studied groups (Table). Significant higher diastolic pressure in group A was the only difference between group A and B during surgery (Table).

Time3 Adj.Mean (S.E.)	<u>Diastolic</u>	<u>Systolic</u>	<u>HR</u>	<u>RR</u>
<u>Control</u>	68.99(1.70) A**B**	113.37(2.19) A**B**	122.42(2.94) A**B**	48.33(1.04) A** B**
<u>Group A</u>	56.45(1.22) B**	94.96(1.56) B(ns)	87.96(2.10) B(ns)	40.57(0.75) B(ns)
<u>Group B</u>	51.04(1.19)	95.22(1.56)	86.99(2.09)	40.28(0.75)

**=p<0.01

Abdominal wall relaxation achieved satisfying level through surgery in both group A and B and was significantly better than in the control group (p<0.01). Preemptive analgesia using rectus abdominis muscle with periumbilical infiltration (group B) seems to be slightly superior regarding hemodynamic parameters. Our study emphasizes the importance of preemptive analgesia for umbilical hernia repair concerning hemodynamic parameters and abdominal wall relaxation.

EFFECTS OF NOVEL ANTIDIURETIC HORMONE RECEPTOR ANTAGONISTS ON RENAL FUNCTION AND CARDIAC HYPERTROPHY IN RATS WITH EXPERIMENTAL CONGESTIVE HEART FAILURE

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Congestive heart failure (CHF) is characterized by activation of neurohormonal systems. While the contributions of the renin-angiotensin and sympathetic nervous system have been well established, the role of vasopressin (AVP) in CHF has not been thoroughly studied. In advanced CHF, AVP contributes to water retention, edema formation and hyponatremia. The development of selective, potent and orally active AVP antagonists composes an excellent tool to elucidate the involvement of AVP in evolving CHF. Therefore, the purpose of this study is to examine the renal effects of acute and chronic treatment with highly selective, novel and non-peptide AVP receptor V₂ (SR121463B) and V₁ (SR49059) antagonists, in rats with experimental CHF produced by surgical creation of an arterio-venous fistula (ACF) between the abdominal aorta and inferior vena-cava. The placement of A-V fistula caused progressive sodium retention, and significant increase in AVP (14.2±3.6 vs. 37.7±9.6 pg/ml, P<0.05). Intravenous bolus injection of SR121463B (0.3 mg/kg) to sham controls produced dramatic diuretic response (V increased from 5.5±0.8 to 86.3±21.9 µl/min (p<0.01). In contrast, administration of SR49059 (0.1 mg/kg) did not affect V (from 4.7±1.0 to 5.4±1.0 µl/min, p=NS). Similar to control rats, administration of SR121463B, but not SR49059, to rats with CHF significantly increased V from baseline levels of 20.8±6.4 to 91.6±26.5 µl/min (p<0.01). The diuretic effects of SR121463B were associated with significant decline in the osmolality of the urine both in sham controls and CHF rats. Despite the dramatic diuretic effect of SR121463B, it has non significant effect on urinary Na⁺ excretion. In line with the acute effects, chronic administration of SR121463 (3.0 mg/kg/day, P.O) to CHF rats for 7 days, increased daily urinary volume 3 fold throughout the treatment period. Despite the improvement in kidney function of CHF rats, SR121463B did not reduce cardiac hypertrophy characterizing this clinical syndrome. These results suggest that V₂, but not V₁, antagonist improves water balance in CHF, and might be beneficial compound for the treatment of edema associated with heart failure.

ADVERSE EFFECTS OF PNEUMOPERITONEUM ON RENAL FUNCTION: INVOLVEMENT OF THE NITRIC OXIDE AND ENDOTHELIN SYSTEMS

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Background: Increased intra-abdominal pressure-IAP (pneumoperitoneum) during laproscopic surgery may result in adverse effects on kidney function with oliguria as the most prominent renal effect. The mechanisms underlying this phenomenon have not been fully determined.

Objective: The present study was designed to investigate the: 1- effects of incremental increases in IAP on renal function in normal rats; and 2- the involvement of nitric oxide (NO) and endothelin (ET) systems in renal dysfunction characterizing pneumoperitoneum.

Methods: Male rats were organized into five groups (n=6-7). The first group was subjected to IAP of 0 (baseline), 7 or 14 mmHg, over 1h for each pressure, followed by deflation period of 30 min (recovery). Four additional groups were pretreated with: 1) nitroglycerine-NTG 2) L-NAME, NO synthase inhibitor, 3) ABT-627, an ET_A receptor antagonist, and 4) A-192621, an ET_B receptor antagonist, before applying 14 mm Hg for 1h, followed by desufflation to 0 mmHg. Urine flow rate (V), absolute and fractional Na⁺ excretion (UNaV, FENa, respectively) and glomerular filtration rate (GFR), and renal plasma flow (RPF), were determined throughout the experiments.

Results: There were no significant changes in V, UNaV, FENa, GFR, and RPF during 7 mmHg insufflation. However, significant reductions in these parameters were observed when 14 mmHg was applied: V from 8±1 to 5±0.5µl/min, UNaV from 1.08±0.31 to 0.43±0.1 µEq/min, FENa from 0.42±0.11 to 0.27±0.05%, P<0.05. These alterations in excretory functions were associated with decline in GFR from 1.68±0.12 to 0.96±0.06 ml/min and RPF from 8.15±0.87 to 3.82±0.16 ml/min, (P<0.05). When the animals were pretreated with NTG, the adverse effects of IAP of 14 mmHg on V, UNaV, FENa, GFR and RPF were improved by 40%. In line with this notion, pretreatment with L-NAME remarkably aggravated the hypoperfusion/hyposufflation associated with pneumoperitoneum. Interestingly, the adverse renal effects of the later were augmented by blockade of the ET system.

Conclusion: Decreased renal excretory function and hypofiltration are induced by increased IAP pressure to 14 but not 7 mmHg. These effects are most likely related to impairment of renal hemodynamic, and could be partially ameliorated by pretreatment with NTG, and aggravated by NO deficiency and ET blockade.

OVEREXPRESSION OF SKP2 IS ASSOCIATED WITH RESISTANCE TO PREOPERATIVE ADRIAMYCIN-BASED CHEMOTHERAPY IN PRIMARY BREAST CANCER

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Introduction: Preoperative chemotherapy is often used in patients with locally advanced breast cancer. However, commonly used clinical and pathological parameters poorly predict response to therapy. Lack of response may lead to unnecessary exposure to drug side effects, loss of time to treatment and tumor progression. Recent studies have suggested that altered cell cycle regulation in cancer may be involved in resistance to chemotherapy. Overexpression of the ubiquitin ligase Skp2 results in loss of the cell cycle inhibitor p27 and is associated with poor prognosis in early breast cancer. The purpose of the present study was to examine the role of these proteins as predictors of prognosis and response to chemotherapy in locally advanced breast cancer.

Methods: Tumor expression of Skp2 and p27 was determined by immunohistochemistry both before and after preoperative chemotherapy in 40 patients with locally advanced breast cancer. All patients were treated with cyclophosphamide/ adriamycin / 5-fluorouracil (CAF) and some received additional treatment with docetaxel. Expression data were compared with patients' clinical and pathological features, clinical outcome and response to chemotherapy. The effect of adriamycin on cell death was examined in MCF7-Skp2 transfected cells.

Results: Preoperative Skp2 expression was inversely related to p27, tumor grade and estrogen and progesterone receptors. Both Skp2 and p27 were accurate prognostic markers for disease-free and overall survival. High preoperative expression of Skp2 was associated with resistance to CAF therapy in 94% of patients ($p < 0.0001$), but not with docetaxel. Skp2 transfection resulted in decreased cellular death rate in MCF7 cells ($p = 0.019$).

Conclusion (s): Skp2 expression may be a useful marker for predicting response to adriamycin-based preoperative chemotherapy and clinical outcome in patients with locally advanced breast cancer.

DIRECT HERPES SIMPLEX VIRUS 1 (HSV-1) DELIVERY INTO RECTAL ADENOCARCINOMA IN MICE RESULTS IN AN EFFICIENT ANTI-TUMOR EFFECT

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Purpose: Cancer of the rectum is a common clinical problem. Because of its anatomical location in the pelvis and the proximity to the anal sphincters, rectal cancer poses a complex therapeutic challenge. The current standard of care combining neoadjuvant therapy followed by surgery has been shown to confer good survival rates and low local recurrence rates. This approach allows preserving sphincter function thus enhancing quality of life. We have recently shown that HSV-1 preferentially infects human colon cancer compared to normal colonic mucosa suggesting that HSV-1 based therapy may offer a novel therapeutic modality for rectal cancer. To determine the oncolytic effect of HSV-1 in a clinically relevant setting, we examined the effect of intra-tumoral delivery of HSV-1 into rectal adenocarcinoma in mice.

Methods: Orthotopic rectal tumors were established by injecting mice colon adenocarcinoma cells (CT-26), stably transfected ex-vivo to express luciferase, directly into the submucosa of the distal rectum. The tumor response to viral therapy was assessed by imaging of luciferase expression in-vivo.

Results: Intra-tumoral injection of HSV-1 resulted in complete arrest in tumor growth. HSV-1 increased animal survival by two folds. Histological analysis of the tumors injected with HSV-1 revealed a massive apoptotic response signifying a combined direct oncolytic and bystander effect. There was no HSV-1 gene expression or notable damage in the adjacent colonic mucosa or distant organs.

Conclusions:

These results demonstrate the efficacy of HSV-1 delivery into orthotopic rectal cancer and may provide the basis for a novel clinical therapeutic neoadjuvant modality for rectal cancer

PRIMARY REPAIR OF PERINEAL TEARS. THIRTY NINE MONTHS FOLLOW UP ON 23 WOMEN

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Purpose: Sphincteric tears following vaginal delivery are common. The disabilities associated with inadequate repair of the sphincter vary from minor discomforts to complete lack of control. This study describes our experience with primary repair of perineal tears.

Methods: Over 3 years women who during delivery had presented with perineal tears of grade 3 or more were evaluated by a colorectal surgeon. The women were then taken to the operating room for an immediate primary repair. Routine examinations including rectal manometry and ultrasound as well as phone interviews were conducted and serve as the basis for this report.

Results: Twenty three women with primary rectal sphincter repair were operated immediately after delivery. Twenty one patients sustained grade 3 tear and 2 patients grade 4 tear. Continuous follow up was obtained on 18 patients. The mean follow up period was 39 months (range 24-60). Thirteen women have no control issues, 3 reported of gas leaks and 2 reported occasional stool leaks usually of diarrhea. No complaints of pain were recorded. Nine women delivered again, 2 delivered twice. Except in one Cesarean section was performed in all cases as a precaution. All women reported normal and pain free sexual intercourse. One woman required another operation 3 months following the initial repair.

Conclusions: Primary repair of rectal sphincter torn during delivery is a safe reliable approach. Long term outcome is satisfactory and allows women to have normal life style with minimal discomforts. Vaginal deliveries are rare due to the precautions taken in these cases.

LAPAROSCOPIC REVISIONAL BARIATRIC OPERATIONS - LESSONS LEARNED IN 19 PATIENTS

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Background: Restrictive bariatric operations are followed by high failure rate. Nowadays reoperations can be done laparoscopically and there are several options to choose from. We report on our experience and describe the pitfalls.

Patients and Methods: Data on consecutive 19 patients who underwent laparoscopic revisional bariatric operation was prospectively collected between 02/2006 and 12/2007. Eleven patients were operated for failure of silastic ring vertical gastroplasty (SRVG) and eight patients were operated for failure of laparoscopic gastric banding (LGB). The average preoperative age and BMI were 38 years and 43 kg/m².

Results: Among the 11 patients who failed SRVG, 6 underwent Gastric Bypass (GB) [OR time 368 (210-460) min], and 5 underwent Sleeve Gastrectomy (SG) [OR time 208(150-270) min]. One patient who underwent GB suffered from anastomotic leak, that was treated conservatively. Of 5 patients who underwent SG, four suffered from complications (2- stapler line leak, 2- intraabdominal abscess). Among the 8 patients who failed LGB, 6 underwent GB [OR time 230 min (195-285), one underwent duodenal switch and one SG. There was one wound infection in this group. There was one reoperation in the whole group. Follow up has shown adequate reduction of body weight and improved quality of life.

Discussion: Revisional bariatric operation is a challenging laparoscopic procedure. Perioperative morbidity is higher comparing to primary operations. The morbidity of LSG as a revisional operation after SRVG is significantly higher in comparison to GB. High complication rate should be taken into consideration and all options should be discussed.

LAF AET COLON RESECTION FOR TUMORS OF THE COLON

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Despite the fact that there still exists a dispute in the medical literature concerning the best surgical method of excision of tumors of the colon between laparoscopic resection and traditional open resection, the last years seem to have favored laparoscopic resection of colon tumors due to the fact that it has been proven that there are no differences in oncological results between the two methods.

The laparoscopic approach has many advantages, however this approach also has some disadvantages the most prominent being:

- 1) Longer surgical time (at least 1 hour)
- 2) More expensive procedure (at least \$2000)
- 3) A long learning curve (fifty operations)

In order to overcome these shortcomings, a technique with new technology has been developed. This technique which we are presenting - the Lap. Assisted Ferdman-Argov Economic Technique - LAF AET allows

- 1) Shortening of the time of surgery to a time comparable with open resection.
- 2) Significantly decrease the cost of surgery
- 3) Decreased learning curve

Principles of the LAF AET technique

- 1) Laparoscopic survey of the peritoneal cavity
- 2) Release of large bowel with scissors and normal diathermy.
- 3) Performance of a transverse incision of the abdominal wall above the area of the resection.
- 4) Removal of the released large bowel with the tumor from the peritoneal cavity
- 5) Resection of the large bowel with the tumor and performance of the anastomosis as is done in the standard open procedure
- 6) Closure of the abdomen in layers

Between the years 2000-2004, 62 patients underwent excision of large bowel tumors by the LAF AET method.

All patients received Post Op. Epidural Anesthesia for the first one to two days post surgery.

Passage of gas per rectum appeared one day post surgery and the first stools were noted 3 days post surgery.

Clear fluids were initiated the day after surgery, a fluid diet was started 2 days after surgery and soon afterwards a soft diet was started.

Complications intra op were 3%.

Discharge from the hospital occurred on an average of 5 days post surgery.

Average follow up was 36 months.

Aesthetic results were judged to be good-excellent in 90% of the cases.

The results of the LAFASET operation are similar to the results of laparoscopic performed resection with the addition of the following advantages:

- 1) Operation time 120minutes after 10 operations.
- 2) Wound length in 55% of cases less than 10cm.
- 3) Intraoperative complications less than 3%
- 4) Necessity for minimal oral post op analgesia
- 5) Short recovery of bowel function
- 6) Lower post operative morbidity rates
- 7) Short hospital stays
- 8) Lower operative costs (\$2000-3000)
- 9) Good cosmetic results
- 10) Short learning curve (5-10operations)

Summary

LAFASET enables the performance of a safe resection of carcinoma of the large bowel according to the requirements of the oncological surgeon with results similar to laparoscopic surgery, with time and cost of surgery comparable with traditional open resection.

All general surgeons with experience with laparoscopy and large bowel resection will be able to learn the method in minimum time.

THE VALUE OF LOW DOSE 99MTC-SESTAMIBI SPECT/CT IN PRESURGICAL ASSESSMENT OF PARATHYROID ADENOMAS

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A trend toward limited surgical procedures such as minimally invasive parathyroidectomy and endoscopic surgery has emerged recently as surgical treatment for parathyroid adenoma. This recent surgical trend requires precise preoperative localization of the parathyroid adenoma. There are a number of studies comparing the efficacy of the hybrid single photon emission computed tomography/computed tomography (SPECT/CT), using 99mTc-sestamibi (MIBI), to SPECT MIBI alone. These studies report the use of a CT scan in the hybrid test for anatomic localization of the high signals observed on the SPECT MIBI prior to surgery.

In a prospective study of 14 consecutive patients with suspected parathyroid adenoma, a SPECT/CT was undertaken prior to surgery before entering the operation room by using SPECT/CT with a low dose of 5 millicurie MIBI and images that were acquired only 10 minutes after injection. Imaging data were compared with preoperative US and SPECT MIBI, and with intraoperative findings.

Three erroneous preoperative US results compared to two erroneous SPECT/MIBI and only one incorrect hybrid SPECT/CT scan were found in our study with a PPV of 0.7857, 0.8571 and 0.9285 respectively. Incorrect results were obtained in all modalities in one patient.

These high rates of detection of the SPECT/CT are attributed to the novel technique used in our study. The lower amounts of MIBI used with our patients enabled less uptake in the thyroid and submandibular glands and lesser degree of patient irradiation. Furthermore, although the use of a very short period of time to imaging after the MIBI injection has the potential risk of high rates of false positive results due to the concomitant thyroid gland uptake, the complementary data obtained from the CT scan (for identifying and not only for localization), lowered significantly false negative rates, gaining a very high PPV.

In conclusion, we present very high rates of positive preoperative identifications and localization of parathyroid adenomas using a novel technique with low MIBI dose undertaken for a short period of time whilst using SPECT and CT scan for identifying and localization of a parathyroid adenoma at the day of operation.

CAROTID BODY TUMORS: A SINGLE DEPARTMENT'S EXPERIENCE

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Paragangliomas of the head and neck usually originate from the carotid body, might surround vessels and involve cranial nerves. Only about 1000 cases of carotid body tumors (CBT) are described in the literature.

The tumors often present as a slow growing, asymptomatic mass, although symptoms might be present, including ischemic events. Shamblin classified CBT into stages, according to the difficulty of resection.

Diagnosis is made by radiographic means: US Doppler, computed tomography with contrast and three dimensional reconstructions, MRI and angiography.

Treatment of CBT is surgical. In the past, rates of 30% and 50% mortality and stroke, respectively, were accepted. This data has changed dramatically due to the advance in surgical technique. The goals of surgery are total resection of the tumor, through preservation of cervical vessels and nerves.

The department's experience in resection of cervical paragangliomas, includes 8 cases. One patient was operated on at Shamblin stage 1, five patients were Shamblin stage 2, and two patients stage 2-3. Six patients had normal postoperative course. One patient suffered postoperative hematoma that necessitated re-exploration. In another patient, the Hypoglossal nerve was transected during surgery. One of the patients had a Vagal glomus, that encased the nerve which was resected during surgery. In three patients, Shamblin stage 2, the External Carotid artery was resected during surgery. All the patients are alive, in up to 16.5 year follow up.

We will discuss the department's experience and describe one case in particular, presenting the diagnosis process, surgery, pathologic evaluation and postoperative course.

RANDOMIZED PROSPECTIVE TRIAL: HEMODYNAMICS AND RENAL FUNCTION WITH RESTRICTIVE OR LIBERAL INTRAOPERATIVE FLUIDS IN LAPAROSCOPIC BARIATRIC SURGERY

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Aim: Laparoscopic operation causes transient depression of renal function. We devised a study to elucidate if different protocols of fluid management will affect intraoperative hemodynamic and renal functions in bariatric surgery.

Methods: 51 patients undergoing laparoscopic surgery for morbid obesity (Roux-en-Y Gastric Bypass, Duodenal Switch, or Sleeve Gastrectomy) were randomized to receive intra-operatively either liberal (LG, n=26, 10 ml/kg·hr) or restrictive (RG, n=25, 4 ml/kg·hr) amounts of Ringer's lactate solution. Demographic data, hemodynamics and perioperative renal function were compared between groups. Results are presented as mean±SD.

Results: Patients' demographics and preoperative blood tests were similar between the groups. Preoperative BMI was 43.7±5.0 and 44.4±5.3 in the LG and RG, respectively, p=0.6. Duration of anesthesia was similar in two groups (204±63 min and 201±73 min, LG and RG, respectively). Patients in the LG received significantly more fluids intraoperatively (3801±2318ml) compared with the RG (1449±773, p<0.001). Hemodynamic changes requiring vasoactive drug administration were not significantly different (17% vs 24%). Intraoperative urine output was very low in both groups (122±203 ml and 126±147 ml during the whole procedure, LG and RG, respectively, p=0.9) and serum creatinine was within normal range with no statistical difference between the groups. In both groups significant decrease in arterial blood pH associated with increases in base deficit occurred at the end of surgery.

Conclusions: The amount of fluids administered intraoperatively during laparoscopic bariatric surgery has no impact on patients hemodynamics, urine output, acid-base status or renal function. The clinical significance of this finding awaits further study.

LAPAROSCOPIC REPAIR OF LEFT PARADUODENAL HERNIA

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We present an unusual case of a 53 year old woman who was admitted to the Emergency Department due to acute abdominal pain and recurrent vomiting. She is usually health with no past medical history and no previous surgeries. She complained of diffuse abdominal pain, nausea and vomiting. On physical examination she appeared dehydrated. She was tachycardic up to a heart rate of 110 but with normal blood pressure and no fever. Her abdomen was diffusely tender but with no signs of peritonitis. Lab results were normal except for an elevated white cell count of 14,000.

Abdominal x-ray demonstrated dilated small bowel loops with fluid levels, suggesting of small bowel obstruction. Abdominal CT scan was performed which revealed dilated small bowel loops inside the left Para- duodenal fossa. A preoperative diagnosis of small bowel obstruction due to a left Para-duodenal hernia was made and the patient was prepared for an emergent operation.

A diagnostic laparoscopy was performed which demonstrated multiple dilated small loops of bowel herniated through the left Para duodenal fossa causing the small bowel obstruction as suspected. The small bowel was then reduced from the sac into the peritoneal cavity. No signs of ischemic bowel were noted and the hernia defect was closed with silk sutures. Her postoperative course was uneventful. She was discharged on postoperative day 3 with no abdominal pain tolerating regular diet.

SELECTIVE VENOUS SAMPLING ENABLES MINIMALLY INVASIVE PARATHYROIDECTOMY IN PATIENTS WITH NEGATIVE PREOPERATIVE LOCALIZATION STUDIES

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Introduction: Patients with primary hyperparathyroidism (PHPT) and a negative sestamibi scan and ultrasound will be studied. In this group of patients a conventional bilateral neck exploration is usually performed in order to identify a parathyroid adenoma. In the present investigation we studied the feasibility of parathyroid adenoma localization by PTH selective venous sampling in patients with a preoperative negative Sestamibi scan patients. When a positive gradient is found minimal invasive parathyroidectomy is attempted

Methods: In patients with PHP and a negative sestamibi scan, a preoperative PTH selective venous sampling study will be performed. When a PTH gradient will be found, indicating the location of the adenoma, a minimal invasive procedure will be chosen.

Results: From May 1997 to December 2007 a total number of 435 patients with hyperparathyroidism (HPT) were operated. There were 362 patients with PHPT and 73 patients with secondary HPT. In 302 of the patients a parathyroid adenoma was resected. Minimal invasive parathyroidectomy was performed in 271 (89.7%) of the 302 patients.

Preoperative PTH selective venous sampling (PTH-SVS) was performed in 50 patients. In 26 (76.4%) of the 34 patients with a negative Sestamibi scan, preoperative PTH- SVS correctly located a single parathyroid adenoma, and allowed successful MIP in 19 patients. A total number of 354 patients (97.8%) of the 362 patients with PHP were cured by surgery

Conclusions: Preoperative PTH -SVS may represent a safe and effective method for localization of a parathyroid adenoma in patients with PHPT and negative or controversial localization studies. When a significant PTH gradient is demonstrated, minimally invasive parathyroidectomy is feasible in a considerable number of the patients.

GENDER DIFFERENCES IN THE RESPONSE TO ABDOMINAL COMPARTMENT SYNDROME IN RATS

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Background: Abdominal compartment syndrome (ACS) is defined as an increased intra-abdominal pressure (IAP > 20mmHg) in combination with single or multiple organ dysfunction which was not previously present. Studies have demonstrated that estradiol, the predominant sex hormone in females, has protective effects on cardiovascular and hepatocellular functions after trauma-hemorrhage. The aims of the present study were to compare the hemodynamic and metabolic response to ACS in female and male rats, and to assess the survival rate differences between the two groups.

Materials and Methods: After anesthesia and cannulations, a group of 32 male rats and 32 female rats were randomly divided into 4 groups: Group 1 (n = 8) sham-operated including cannulation and insertion of sterile balloon to the abdominal cavity. Group 2 (n = 8), IAP was increased to 10 mmHg. In group 3 (n = 8), IAP was increased to 20 mmHg, and in group 4 (n = 8), IAP was maintained 30 mmHg. The animals were observed for 4 hours. Mean arterial pressure, heart rate, hematocrite, blood lactate, blood pH and blood glucose were determined just before laparotomy (time=0) and at 15, 30, 60, 120, 180 and 240 minutes after induction of abdominal pressure. Estradiol levels were determined before the experiment.

Results: Increase in intraperitoneal pressure to 20 mmHg and 30 mmHg led to a decrease in mean arterial pressure (MAP) from 116.13 ± 3.9 to 51.8 ± 7.1 mmHg ($p < 0.01$) and 33.3 ± 9.3 ($p < 0.01$) mmHg respectively, in male rats. In female rats similar increase of intra-abdominal pressure (IAP) led to a decrease in MAP from 93.75 ± 2.0 to 73.14 ± 6.3 mmHg ($p < 0.05$) and 52 ± 3.4 ($p < 0.05$) mmHg, respectively. Thus, the decrease in blood pressure that was observed in females was lower than that observed in males. In males subjected to 20 or 30 mmHg, IAP glucose level was reduced in comparison to control rats, while in female rats blood glucose was elevated when they were subjected to 20 mmHg, but was reduced after they were subjected to 30 mmHg. Lactate level was also elevated in males subjected to 20 mmHg or 30 mmHg IAP and in females subjected to 30 mmHg. In females subjected to 20 mmHg lactate was elevated only after 2 hrs. The pH levels were reduced in both male and female rats subjected to 20 or 30 mmHg compared to control rats. However, the reduction in pH observed in females subjected to 20 mmHg was significantly lower than that observed in males ($p < 0.05$). In addition, females that were subjected to IAP of 30 mmHg had significantly better ($p < 0.05$) survival than males that were subjected to the same condition.

Conclusions: Our results indicate that female rats can preserve their blood pressure as well as their hemodynamic parameters better than male rats during intra-abdominal hypertension and therefore can be better protected against lethal ACS than males.

DO WE NEED INTERVAL APPENDECTOMY?

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Introduction: There are few articles about Interval Appendectomy after successful conservative treatment in Periappendiceal abscess or Periappendiceal mass/phlegmons. There are conflicting opinions whether interval appendectomy should be recommended for adults with an appendix mass or abscess. It seem that routine interval appendectomy benefits in less than 20% of patients. We decided to check our policy not to perform an interval appendectomy to those patients.

Methods: From January 2000 to January 2008 patients with appendiceal mass or abscess who received conservative treatment at our hospital were studied retrospectively. Patients were asked to answer telephonic questionnaire. Data on demographics, rate of appendicitis recurrence and operation, symptoms of abdominal pain, and complications were collected and analyzed.

Results: A total 26 patients were included. Mean follow-up was 42 months (range 11 months to 8 years). 24 of 26 (92.3%) patients were found to follow-up. Three (12.5%) had a recurrent acute appendicitis all within 1 year of follow-up, and underwent appendectomy with no complication. All other patients were well with no symptoms or complications.

Conclusions: The policy of follow-up with out performing an interval appendectomy seems safe. A larger and prospective study is needed to confirm this recommendation.

LIVER TRANSPLANTATION FOR HEPATOCELLULAR CARCINOMA- THE HADASSAH MEDICAL CENTER EXPERIENCE

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Background: To date, surgery remains the mainstay modality providing patients diagnosed with Hepatocellular Carcinoma (HCC) a chance for a prolonged disease free state and even cure. In the west, background chronic liver disease is a known surrogate of HCC. Therefore, tumor extraction and replacement of the architecturally damaged liver, both uniquely unified in Liver Transplantation (LT), became a standard care. However, facing the practical restrains of organ shortage, there is no consensual clinical pathway to follow.

Patient & methods: Between 1995 -2008, 23 patients underwent LT for the combination of Liver Cirrhosis & HCC. 18 patients (78%) were tested positive for liver avid viruses. Except for 5 patients, all were within the Milan boundaries. In 9 patients (39%) trans-arterial chemoembolization was administered prior to transplantation. 19 patients received a whole cadaveric graft, 1- Rt lobe cadaveric split graft and in 3 patients a living donated Rt lobe was grafted.

Results: 15 patients (65%) are alive after LT (median follow-up: 49.6 month, range 2-138 m). All, but one, are free of recurrent disease. Perioperative mortality was documented in 5 patients (21.7%), 2 patients (8.6%) died of recurrent viral hepatitis whereas, only one of metastatic disease (4.3%).

Conclusions: Survival post transplantation is dictated, more by factors such as background liver disease and immediate peri-operative outcome, than early stage HCC. In cases of early cancer, we advocate a sound use of the national allocation system for individual score optimization. Once listed, judicious use of ablating procedures are recommended as a bridge. A more aggressive strategy is warranted toward advance disease, by exhausting resources such as marginal donors.

SATISFACTION LEVEL, QUALITY OF LIFE, LEISURE TIME OF RESIDENTS AT THE SOROKA UNIVERSITY MEDICAL CENTER, BE'ER SHEVA, ISRAEL

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Introduction: Work dissatisfaction among physicians world wide, is rising in the last few decades, from less than 15% in the seventies of the last century, to about 30%-40% in the last decade. The main reasons for this change includes low income levels, declining of professional prestige, lack of self fulfillment, time pressure and lack of leisure time. Physicians' burnout is a major result of dissatisfaction, causing doctors to leave the medical profession, and to provide lower quality of care.

Objectives: To examine work satisfaction, quality of life and leisure time of residents, in the Soroka University Medical Center.

Materials & Methods: A validated questionnaire was delivered to 252 residents in the Soroka University Medical Center.

Results: The response rate of 54.36% (137 residents). The residents' satisfaction level with patient care, self fulfillment and internal work relations was high. However, satisfaction level with work load, income, quality of life and leisure time was low. As a consequence, the general index of satisfaction, which summarizes all the variables, was low. Residents in the early stage of their internship were more satisfied than residents who were after the first stage regarding their income ($p=0.005$), and their retirement settlements. Surgical residents were less satisfied in general ($p=0.003$), mainly from the work relations with their superiors ($p=0.015$).

Discussions & Conclusions: The residents in the Soroka University Medical Center are satisfied with their work environment but not with their quality of life and leisure time. Dissatisfaction may cause physicians' burnout, which might affect quality of care.

FATIGUE IN MEDICAL RESIDENTS – THE SUMC EXPERIENCE

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Introduction: Fatigue among medical residents is a well known and common phenomenon. The fatigue is a direct result of continuous and long working hours with the addition of frequently repeated overnight duties.

Material & methods: The current study was carried out to evaluate self-reported fatigue and sleep deprivation and some of its major consequences. Residents were asked to answer a questionnaire about their personal lives and fatigue level (an adaptation of the ESS).

Results: We found that the average weekly work consists of 68.1 ± 12.4 hour. Residents reported 6 ± 1.25 hours of sleep per night of a regular day and a meager average of 1.05 hours (± 0.51 hours). The ESS score of our subjects was found to be at 11.45 ± 5.4 points, while experts advise to evaluate individuals for serious sleep disturbances with an ESS score above 9. We found that the number of weekly working hours was a significant predictor of the ESS score. The majority of residents reported driving their own vehicle after night shifts and of those who drove, 29.3% of the residents reported that they fell asleep at least once during the past month while driving. 13.9% of the residents reported that they were involved in a motor vehicle accident (MVA). We found a significant correlation between MVAs and the number of years in residency.

Discussion & conclusions: In view of these results, we call upon the authorities to develop appropriate working conditions that will ensure the safety of the patients and residents alike.

CONVEYING BAD NEWS - UPON THE ATTITUDES OF PRIMARY CARE PHYSICIANS AND THEIR PATIENTS

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Introduction: Physicians are needed to convey bad news daily. Research has shown that physicians find this part of their occupation extremely harsh.

Objective: To examine when the attitudes and perceptions of primary care physicians and their patients are in accordance, and when they differ what are the main points of disagreement?

Material & methods: We used semi-structured questionnaires to inquire about the attitudes of primary care physicians (residents and seniors), as well as their patients, regarding how to convey bad news. Each physician was asked to answer the physician's questionnaire and request 3-5 of his adult patients to fill the patient's questionnaire. Data was analyzed and introduced to the community of primary care physicians in Beer-Sheva as part of an educational program.

Results: We found that there were significant differences between the attitudes of physicians and patients. We propose an interventional program to clarifying these differences to our primary care physicians.

Discussion & conclusions: We found that showing residents and senior physicians alike what are the similarities and the differences between their own attitudes and the patients' attitudes, is an educational intervention because knowledge by itself can be a source for change.

Further studies: We intend to adjust our educational workshop to primary care physicians, in which we intend to use SP's to evaluate the physicians' abilities to convey bad news. We believe that based on the results of the patients and physicians' attitudes, it is possible to develop clinical guidelines for all primary care physicians, regarding breaking bad news.

LAPAROSCOPIC RESECTION OF INTESTINAL CARCINOID TUMORS

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Introduction: Due to many major advantages, laparoscopic intestinal surgery is the preferable technique in the majority of intestinal operations. Interestingly, there are currently only several reports on laparoscopy for intestinal Carcinoid tumors (ICT). This may be related to several factors, namely, the concern of laparoscopic technique in malignancy, the technical difficulty in performing radical mesenteric lymph node resection often required in these operations, and the difficulty in identifying a small primary ICT.

Aim: To evaluate the outcome of laparoscopic resection of ICT.

Patients and Methods: All consecutive patients with ICT since 2002 underwent laparoscopic resection. Patients information, clinical data, preoperative endocrine work up, imaging studies, operative data, final histology and outcome were recorded and analyzed.

Results: Between 2002-2005, 23 patients (15 female, 8 male, age 24-68y) were operated for ICT. 19 patients had a small bowel tumor, 3 had a colonic tumor and one patient had a rectal ICT. 4 patients in the small bowel ICT group had distant metastases at the time of surgery. All patients underwent a laparoscopic resection with no conversion to open surgery. 2 patients (8.6%) suffered minor morbidity with wound infection and prolonged ileus each. The length of stay was 4-8 days. During 3-58 months of follow up, there were no local or distant recurrences in all patients who were operated with intent to cure. The primary tumor was identified in all cases including tumors as small as 7 mm in size.

Conclusion: Laparoscopic resection of ICTs is feasible and safe with the additional known advantages of laparoscopic surgery. Similar to large-scale studies, which proved the safety of laparoscopic surgery in colorectal cancer, our study shows that the laparoscopic technique may also be oncologically safe in ICTs.

HAND ASSISTED LAPAROSCOPIC SURGERY (HALS) FOR LIVER TUMORS

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Laparoscopy has clearly advanced the treatment of many diseases related to the liver and biliary tree. The addition of hand assistance can further facilitate minimally invasive liver surgery by providing tactile feedback, atraumatic and versatile retraction and more precise placement of probes and staplers.

Methods: Between July and December 2007, five patients with liver tumors underwent liver resections using a Hand Assisted Laparoscopic Surgery (HALS) technique. The candidates for hand-assisted laparoscopic resection were patients with lesions involving two hepatic segments or fewer located at the inferior edge of the liver (segments 5 and 6), confined to the left lateral segment (segments 2 and 3) or located at the anterior surface of the liver (segments 5 and 8).

Results: Five patients with malignant tumors were operated; the mean age was 65 ± 11 years. Four of the patients had metastatic colorectal cancer and one patient had hepatocellular carcinoma. The tumor mean size was 3 ± 1 cm. Non-anatomic wedge resection was performed on three patients, anterior resection and left lateral lobectomy was performed on one patient. Conversion to laparotomy due to hepatic vein bleeding was required on one patient. Two patients were treated with 4 cycles of neoadjuvant chemotherapy. No operative mortality. One patient had wound infection. The mean hospital stay was 5.4 ± 2 days. The mean distance of the free surgical margin was 9 ± 2 mm.

Conclusion: The Hand Assisted laparoscopic surgery approach to liver resection is safe and feasible, and could be considered in selected patients.

HAND-ASSISTED LAPAROSCOPIC SURGERY (HALS) FOR COLON RESECTION

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Introduction: Hand Assisted Laparoscopic Surgery (HALS) was introduced in the beginning of the 1990's in the United States with two reported cases of colon resection using this technique. Since then many surgical centers have been using HALS for an expanded spectrum of abdominal procedures: spleen resection, gastric and small bowel operations, liver and kidney resection and even pancreaticoduodenectomy. In our institute we have been using the HALS technique for more than 2 years, and the results are shown as follows.

Results: During a period of less than 3 years, 57 patients underwent operation for resection of different parts of the large bowel using HALS technique: Right Hemicolectomy - 24 pts., Left Hemicolectomy - 6 pts., Sigmoidectomy - 13 pts., Anterior resection - 9 pts., APR- one patient. There were 4 conversions from laparoscopically assisted to open surgery.

The mean age of the patients was 72 ± 10 years. Most of them had an ASA grade of 2-3 with age specific morbidities (ischemic heart disease, COPD, diabetes and hypertension). As many as half of the patients underwent previous abdominal operations (appendectomy, hysterectomy etc.).

The mean operative time was 127 ± 37 minutes. The patients were started with oral diet 3-4 days postoperatively. The average in hospital stay was 6 ± 2 days until discharge.

Complications: One patient died as a result of respiratory failure. One patient suffered an acute MI postoperatively but recovered within few days. One patient had evisceration of the omentum from a trocar site and was managed bedside. Other minor complications included urinary tract infection, blood transfusion in 2 pts. and short standing ileus in 3 pts.

Pathology results: All specimens were resected within healthy borders. Depending on the specific kind of surgery, the average number of the resected lymph nodes was 14 ± 7 .

Discussion: The HALS technique was used widely as a bridge for "pure" laparoscopic operations. As surgeons accomplished their learning curve (30-40 cases), many have shifted to "full" laparoscopy. Yet, in the United States, the rate of conversion to open surgery is as high as 25%, which is much less using HALS. In our series the conversion rate was less than 10%. The operative time was acceptable as in many centers and was shortened as we gained experience. Average postoperative stay of 6 days with very low rate of complications, and yet keeping all advantages of "pure" laparoscopy, make the HALS technique a promising choice for colon resection.

Conclusion: Although HALS is used in many centers as a bridge to "full" laparoscopy, we find this method very safe and more intuitive for the general surgeon. The oncologic results are comparable to open surgery, but patient recovery and cosmetics are same as "pure" laparoscopy with fewer conversions to open surgery.

METABOLIC AND ELECTROLYTE CHANGES IN PATIENTS THAT UNDERGO MECHANICAL BOWEL PREPARATION

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Introduction: Disease of colon and rectum, mainly cancer and diverticular disease are one of the most common reasons for elective and urgent admissions to the surgical departments.

Most of those patients need endoscopic procedures prior to the surgical intervention. Those procedures require mechanical bowel preparation. The most commonly used preparations include phosphate-contain drugs which have low cost and allow performing the procedure in an outpatient setting as opposed to other medication, such as ethylene glycol .

On the other hand the use of phosphate contain drugs for bowel preparation is related to higher risk of complication like electrolyte and other metabolic disturbance. The patients need close follow up and monitoring of electrolyte and acid-base balance.

Aim: We conducted a prospective randomized study to check the rate and severity of electrolyte and metabolic disturbances in patients that undergo mechanical bowel preparation by phosphate contain medication (Soffodex).

Methods: The study included forty patients who were candidate for elective colonic surgery mainly for cancer and diverticular disease.

Group A- 20 patients prepared for the operations by Soffodex.

Group B -20 patients that underwent colonic preparation by 3 L of Ethylene-glycol (Meroken) 24 hours before the procedure.

In all patients we took blood levels of electrolyte, parameters of acid-base balance and renal function.

The samples of the blood and collection of urine for 24 hours were performed four times in each patient: on admission, at the day of colonic preparation and on the first and third post-operative day.

Patients with signs of chronic renal failure (creatinine level in blood higher than 1.5) or electrolyte disturbances ($K > 5.5$ mg/dL, $Ca > 10.5$ mg/dL, $P > 5.5$ mg/dL) were excluded from this study.

Results: The distribution of age and gender between the two groups and the the results of blood and urine test on admission were similar. The mean age in group A was 62.5 years and in group B 61.5 years.

In both groups some electrolyte and metabolic changes were shown during the bowel preparation. After statistical analysis we found that the patients prepared by Soffodex had more significant disturbance in electrolyte and acid-base including elevated phosphate sodium and osmolarity in serum and decreased levels of potassium, magnesium and calcium, and mild metabolic acidosis. The changes in electrolyte and acid-base were statistically significant compared with baseline levels and compared to the group prepared with Meroken ($p < 0.01$).

The deterioration in renal function demonstrated by decrease in creatinine clearance and rising of serum creatinine was more prominent in patients prepared by Soffodex. Rising serum sodium levels was the only statistical significant change observed in group B before and during colonic preparation ($p < 0.01$).

Discussion: Patients that underwent colonic preparation by phosphate containing drugs (soffodex) are in higher risk to develop hyperphosphataemia most probably as a result of overdose of phosphate and compensatory hypocalcaemia. Other electrolyte disturbances such as decreased level of magnesium and potassium and in parallel rising of serum osmolarity and sodium most probably occurs secondary to osmotic diarrhea effect of Soffodex.

In this prospective randomized study have shown that the use of phosphate containing medications for mechanical colonic preparation might be dangerous and lead to renal failure.

We recommend careful usage of phosphate containing drugs especially in patients with high risk for renal failure.

LAPAROSCOPIC SLEEVE GASTRECTOMY AS A TREATMENT FOR WEIGHT LOSS IN MORBID OBESITY: TECHNIQUE AND SHORT-TERM OUTCOME

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Background: Laparoscopic sleeve gastrectomy (LSG) may represent an additional surgical option in the treatment of morbid obesity. The aim of this study was to assess the safety and short-term efficacy of LSG as a treatment option for weight reduction.

Methods: Data of all patients who underwent LSG for treatment of morbid obesity between October 2006 and February 2008 and completed at least 3-month follow-up visits at the time of the study were reviewed. Data collected included demographics, operative time, length of stay, postoperative and delayed complications, degree of weight reduction and changes in obesity related disease. Results: 24 patients (4 males and 20 females) were operated on and analyzed. Mean age 38 years (20-52 years). Mean preoperative BMI was 42 (36-50) kg/m². All patients had a gastrografin swallow on POD 2 allowing early leak detection. One patient had a major complication. There was no mortality. All patients lost weight. Improvement was observed with sleep apnea, knees and back pain, diabetes, hypertension and asthma.

Conclusions: LSG is an effective and safe primary restrictive procedure to achieve weight loss at short-term follow-up.

BIOLOGIC FOREIGN BODY PLUG FOR COMPLEX PERIANAL FISTULA - OUR INITIAL EXPERIENCE

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Purpose: Complex and trans-sphincteric perianal fistulae remain a surgical challenge. Since conventional approach (i.e. fistulotomy) may result in permanent sphincter injury and fecal incontinence, different surgical options have been introduced. Among these are endoanal mucosal advancement flap, fibrin glue installation and gracilis flap. Recently, placement of foreign biologic material into fistulous tracts was described as a novel approach for treating high trans-sphincteric fistulae. Our initial experience with implantation of the Anal Fistula Plug is presented in this paper.

Methods: Over a period of 24 months (2006-2007), 10 patients presenting with complex perianal fistulae underwent implantation of biological Anal Fistula Plug (Surgisis® Cook Medical) at our institution. The operative procedure followed the manufacturer's instructions and consisted of placement of a conical shaped collagen plug through the fistulous tract.

Results: Ten patients (9 men) with a median age of 51 years (37-67) were operated. All patients had failed previous surgical attempts (Seton drainage or endo-anal mucosal flap). One patient was lost to follow-up. The median length of follow-up was 19 months (4-25). In 5 patients (55%) the fistula resolved completely. Three patients (33%) underwent second procedure (two re-implantations of the plug and one fistulotomy). In one patient the re-implanted plug fell off shortly after the procedure. In the other 2 patients no signs or symptoms of fistula recurred. Overall, the insertion of Anal Fistula Plug initiated closure of complex perianal fistula in 7 of 9 patients (77%)

Conclusion: Our initial experience with the Anal Fistula Plug for complex trans-sphincteric fistula indicates that it is a highly effective means in treating this challenging surgical condition.

Key words: complex perianal fistula, Anal Fistula Plug
Shussman N, Edden Y, Pikarsky AJ.

Biologic foreign body plug for complex perianal fistula - Our initial experience

LAPAROSCOPIC ADRENALECTOMY FOR CUSHING'S SYNDROME DURING 3RD TRIMESTER OF PREGNANCY

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Cushing's syndrome during pregnancy is a rare condition. It is associated with a higher rate of maternal and fetal complications.

We present a case of a woman who was admitted in her 32nd week of pregnancy after full assessment during the previous four weeks, revealing a right adrenal adenoma, as the source of Cushing's syndrome. Due to the great concern about the fetal maturity, and the maternal and fetal possible complications, we performed a laparoscopic Rt. adrenalectomy, after proper preparation. The operative course and postoperative course were uneventful. Finally she gave birth to a healthy girl by a spontaneous vaginal delivery on the 40th week of pregnancy.

Our conclusion from this case is that laparoscopic adrenalectomy should be considered as a possible mode of treatment for a unilateral adrenal cortisol secreting adenoma, in the third trimester of pregnancy.

NISSEN FUNDOPLICATION FOR GASTRO ESOPHAGIAL REFLUX IN THE NORMAL AND NEUROLOGICAL IMPAIRED PEDIATRIC POPULATION

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Our study present 55 children who underwent Nissen fundoplication (NF) between 2000-2007. 30 patients were neurological impaired (NI group1) and 25 were neurologically normal children (NN group2). Age and weight at operation were significantly younger and weighted less in group2 (2 vs. 6 years respectively $p<0.003$ and 9 ± 9.3 Vs 18 ± 12.8 Kg respectively $p<0.002$). 63% children in group1 underwent preoperative diagnostic studies vs. 88% children in group2. 71% underwent laparoscopic NF (90% in group1 vs. 56% in group2). Gastrostomy was placed in 100% of group1, vs. 44% in group2. Post operative complication rate was not significant different between group1 and 2 (13% vs. 16% respectively). Average time of follow up was 22M and 18.5M for group1 and 2 respectively. Long term follow up complication (persistent vomiting, aspiration pneumonia) was 16% in group1 and 13.3% in group2. Re. NF was required in 3 patients (2-group1 and 1-group2).

Our study showed that preoperative diagnostic studies are of less important for neurologically impaired children. High incidence of GERD in this group and the beneficial of the NF to the patient, justify performing Lap. NF based on the clinical diagnosis alone.

Although both open and laparoscopic NF are safe and effective, our study showed that laparoscopic NF is being tolerated better by the patient. Our accumulating experience waived the limitation of performing Lap. NF in low weighted patients who previously underwent open NF.

We found that planning gastrostomy in the NI child should be accompanied by Laparoscopic NF to prevent worsening clinical symptoms of the GERD.

LYMPHOCYTIC INFILTRATION AS A PROGNOSTIC FACTOR IN HIGH GRADE INFILTRATING CARCINOMA OF THE BREAST

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Background: Prominent lymphocytic infiltration (LI) of primary breast tumors is quite a rare pathological finding. The significance of this pathological feature is poorly studied. Poorly differentiated (grade-III) infiltrating ductal carcinoma (IDC) is strongly associated with shorter recurrence-free and overall survival than grade-I and grade-II tumors. The phenomenon of LI may be selective for different subtypes of breast cancer according to modern understanding of breast cancer biology, and this aspect also was not yet studied in depths.

Materials and Methods: 1923 patients with breast cancer diagnosed at our Hospital during the years 1992-2006 served as the basis of this study. From this patient cohort, patients with high grade infiltrating duct carcinoma without neo-adjuvant therapy were selected. All available histological slides were blindly re-evaluated for the presence of a LI. Immunohistochemical phenotyping of the lymphocytes was performed on tumors with LI and included the following antibodies: CD 3, CD 20, CD 4, CD 8. All tumors had immunophenotypes of ER, PR, Her2, Ki-67. Disease-free survival (DFS) and overall survival (OS) were calculated by the Kaplan-Meier test. Statistical analyses of correlation between different characteristics were analyzed by Fisher's exact test and Pearson's chi-square test.

Results: LI was blindly re-evaluated in 339 patients with high grade tumors. There was prominent correlation between significant LI and poor prognostic characteristics of the primary tumor such as high proliferative activity and negative ER and PR. There was no any correlation between Her2 and the presence of LI. The lowest incidence of axillary lymph node metastases was registered in patients with prominent LI. Immunohistochemical analysis was performed in available histological material in 90/103 patients with prominent and moderate LI. Although the total rate of LI was not associated with expression levels of Her2/new protein, infiltration of the tumor by B-lymphocytes was associated with a higher rate of Her-2 protein overexpression, (p=0.045). The same tendency was found for prominent infiltration by T-helper lymphocytes (CD4), (p=0.031). Prominent lymphocytic infiltration was associated with better disease-free survival (p=0.066) and overall survival (p=0.043).