Surgery Research and Publications 2003-2009

THE DEPARTMENT OF GENERAL SURGERY

The department of surgery at the Shaare Zedek Medical Center has always been active in surgical research and education. However, since the merge of the surgical departments in 2003 under a new leadership, it has become a major priority of this department. A monthly research forum was instituted to assist residents and attending surgeons in all aspects of research and publication, and a few clinical research projects have already been launched.

Animal studies laboratory was opened in Shaare Zedek in 2004, lead to an increase in basic science surgical research activity. The development of new animal models however may depend on funding to initiate these models.

The department of surgery is an excellency center for the treatment of breast pathologies, thyroid diseases, colorectal surgery, and laparoscopic bowel and solid organ surgery. The research activities of our department parallel these areas of interest. As a medical center located in Jerusalem, we are also experienced in the care of trauma victims of terror attacks, which has recently become another field of research interest in our department.

Current research activities:

Colon and rectal surgery: Currently there are several studies investigating:
Crohn’s disease patients undergoing laparoscopic surgery, with regard to recurrence, laparoscopic surgery for complicated Chrohn’s disease and laparoscopic total colectomy.

Perioperative care: A prospective randomized study assessing the optimal length of intravenous antibiotics for the treatment of abdominal infections is currently being launched.

Laparoscopic surgery: Retrospective studies on laparoscopic splenectomy for massive. splenomagaly, laparoscopic resection of pancreatic neuro endocrine tumors and laparoscopic adrenalectomy for large adrenal tumors are currently underway. Future planned studies include the effect of hand assisted laparoscopic surgery on stress response, and animal studies on the effect of different protective measures on port site metastasis in laparoscopic surgery for cancer.

The Breast Health Center
Estrogen and progesterone receptors status in involved lymph nodes in breast cancer patients, compared with tumor receptor status Non-identification of the sentinel lymph nodes as a function of axillary tumor load.
Is manual screening of women effective in early detection of breast cancer? Review of 20,000 screened patients and their outcome. Characteristics of Arab breast cancer patients and stage of diagnosis as compared with Jewish patients in Jerusalem Is waiting for an intra-operative XR of the resected specimen helpful in intra-operative management?
Outcome of 140 patients with invasive breast cancer with surgery not including axillary intervention: a 5 year follow up. Ratio of palpable Vs non-palpable tumors found on screening mammography as an indicator of effectiveness of manual screening for breast cancers.

Is sentinel lymph node biopsy justified after previous ipsilateral axillary surgery for breast cancer?

Can cytologic examination of post-lumpectomy fluid collection predict presence of tumor in re-lumpectomy specimens?

The place of sentinel lymph node biopsy in breast cancer patients with clinically suspected lymph-nodes not proven by percutaneous biopsy internal mammary sentinel lymph node biopsy identified by peritumoral injection: experience with 40 first cases and clinical implications

**Hemodialysis Access Unit**

This recently opened department, with emphasis on an integrated team approach, has rapidly become a national referral center for the creation of hemodialysis access (arteriovenous fistula for purifying the patient’s blood in an artificial kidney machine).

The head of the Unit, Dr. David Shemesh, has developed techniques for keeping the access open far beyond it’s expected lifetime, preserving the patient’s “lifeline” and minimizing the number of operations these unfortunate patients have to undergo. The techniques have been published in international journals and presented at international meetings.

**Endocrine Surgery**

With the expansion of the endocrinology service in the internal medicine department, and being already national referral center for adrenalectomy, we hope to become a center for endocrine surgery integrating advanced endoscopic techniques for abdominal lesions, together with further development of thyroid and parathyroid surgery.

**PUBLICATIONS**


CHAPTER IN BOOK


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**CONFERENCE PRESENTATIONS AND ABSTRACTS**


18. **Total and Subtotal Laparoscopic Colon Resection for Benign and Malignant Disease.** Yaron Armon, Joseph Alberton, Alex Mintz, Ram Spira, Petachia Reissman. Oral presentation at the Joint Meeting of Israel’s Society of Gastroenterology and Liver Disease and Israel’s Society of Colon and Rectal Surgery, Dead Sea, 11-13 December 2003.
19. **Poor-prognosis breast cancer in the era of lymphatic mapping and its impact on the type of surgery.** Moshe Carmon, Amiel Segal, Daniel Hain, Constantin Reinus, Rut Isacson, Ora Rosengarten, Ram Spira, Ribhi Abu-Dalo, Alexander Mintz, David Raveh and Oded Olsha. performed, ISCORT Dead Sea, Israel 1.2004

20. **Rates and causes for reoperations in breast cancer patients with a pre-operative diagnosis, treated by breast conserving surgery and sentinel lymph node biopsy.** Moshe Carmon, Amiel Segal, Oded Olsha, Josef Alberton, Louis Rivkin, Ribhi Abu-Dalo, Alexander Mints, Vered Avidan and David Raveh. ISCORT Dead Sea, Israel 1.2004


32. **Intraoperative colonic lavage and colonoscopy in massive large bowel bleeding.** Alberton Y, Olsha O. The Joint Conference of the Israel Society of Colon and Rectal Surgery and the Israel Society of Endoscopic Surgery, Eilat, Israel, December 16-18, 2004


36. **Laparoscopic suture rectopexy and sigmoidectomy for full thickness rectal prolapse.** Abi Vainstein, Vered Avidan, Alex Mintz, Petachia Reissman. – Poster presentation at the Joint Meeting of Israel’s Society of Colon and Rectal Surgery and Israeli Society of Endoscopic Surgery, December 16-18, 2004. Eilat, Israel.


51. **Palpation of the axilla during sentinel lymph node biopsy in breast cancer patients reduces the false negative rate.** Carmon M, Spira R, Mintz A, Weinstein A, Olsha O. 24th Biennial Congress of the Israel Surgical Association, Dead Sea, 29 June – 1 July, 2005


53. **The feasibility of using local anesthetics for inguinal hernia surgery in adolescents.** Olsha O, Odenheimer DB, Frankel D. 24th Biennial Congress of the Israel Surgical Association, Dead Sea, 29 June – 1 July, 2005

54. **The "sentinel chain": possibility of predicting the absence of lymph node metastases in addition to the sentinel node in breast cancer patients.** Carmon M, Olsha O, Shechter W, Raveh D, Reinus C, Hershko D, Golomb E. 24th Biennial Congress of the Israel Surgical Association, Dead Sea, 29 June – 1 July, 2005


70. **Pre-operative lymphatic mapping in sentinel lymph node biopsy for breast cancer patients does not accurately predict the number of radioactive lymph nodes identified during surgery.** Shamailov S, Olsha O, Rivkin L, Avidan V, Carmon M. 25th Biennial Congress of the Israel Surgical Association, Jerusalem, Israel 6 – 7 June, 2007


73. **Pre-operative lymphatic mapping in breast cancer patients may influence the number of sentinel lymph nodes identified during surgery.** Simon A, Olsha O, Rivkin L, Avidan V, Krasilnikov, V, Carmon M. 25th Biennial Congress of the Israel Surgical Association, Jerusalem, Israel 6 – 7 June, 2007


RESEARCH PROJECTS

1. **Surface Acoustic waves for the management of postoperative pain after laparoscopic surgery.** The department of surgery, Shaare Zedek Medical Center.

2. **Crohn’s dis. recurrence following laparoscopic vs. open surgery.** The department of surgery Shaare-Zedek medical center. The department of surgery and Gastroenterology, Tel-Aviv medical center.

3. **Laparoscopic Total colectomy for benign and malignant disorders – outcome analysis.** The department of surgery Shaare-Zedek medical center.

4. **Laparoscopic splenectomy for massive splenomegaly vs. normal size spleens in patients with hematologic disorders.** Dept. of Surgery, Shaare-Zedek Medical Center.

5. **Laparoscopic management of complicated Crohn’s dis. An outcome analysis. Dept. of Surgery, in collaboration with the dept. of Medicine, Shaare Zedek Medical Center.**

6. **Outcome of laparoscopic adrenalectomy for large tumors (> 6cm). Prospective analysis.** Dept. of Surgery, Shaare-Zedek Medical Center.

RESEARCH IN PROCESS, THE BREAST UNIT, DR. MOSHE CARMON

1. The role of pre-operative lymphatic mapping in sentinel lymph node biopsy for breast cancer.

2. Association of maximal radioactivity within sentinel lymph nodes and location of small metastases in the nodes: clinical applications

3. Axillary lymph node dissection and completion axillary dissection after a false negative frozen section in breast cancer. Is it the same operation?

4. **Intraoperative use of involved margins detection device in lumpectomy for breast cancer (Multi-center study, completed, in press)**

5. **Intraoperative use of involved margins detection device in lumpectomy for non-palpable breast cancer (Multi-center study).**

6. Outcome of 140 patients with invasive breast cancer with surgery not including axillary intervention: a 10 year follow up.

7. **Intraoperative management of sentinel lymph nodes: evaluation based on specific lymph node characteristics reduces operative time in breast cancer patients.**