

## Abstracts of Session 8c

### Free papers on hernia surgery

#### 8c1

##### Ambulatory treatment of primary inguinal hernia: 10 year review

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From January 1992 to October 2000, the authors performed on a total of 1915 abdominal hernia repairs, 1694 primary inguinal hernia repairs on 1562 patients in the Ambulatory Surgery Unit of Policlinico Hospital pad. Beretta Est in Milano. The authors intend to confirm both the reliability of plug and mesh repair and the safeness of ambulatory regimen in the treatment of primary inguinal hernia. Among 1562 patients 1444 were male (92.5%) and 118 were female (7.5%), the mean age was of 56 yr (range 8–89). The surgical approach was to use laparotomic plug and mesh technique (modified Trabucco's technique), in local anaesthesia in 1540 cases (90.9%), in epidural anaesthesia in 22 cases (1.3%) and in general anaesthesia in 132 cases (7.8%). Of the patients that underwent surgery in epidural or general surgery, 141 (92.7%) needed a one-night stay in hospital whereas, 13 (17.3%) had to stay two nights for minor complications (urinary retention, fever). The follow up was performed with two ambulatory visits, one week and six months from surgery and with a telephone call one year from surgery to control hernia repair. The authors reported 51 minor complications (32 seromas, 4 haematomas, 10 skin infections, 5 transient neuralgias), no major complication (postoperative bleeding, infection of prosthetic material) and 6 recurrences (0.4%). Only 65 patients were lost at follow-up. Primary inguinal hernia repair, with plug and mesh technique, local anaesthesia and in ambulatory regimen has been demonstrated to be reliable, safe and well accepted by patients.

#### 8c2

##### Lichtenstein's hernioplasty in ambulatory surgery

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The present work had the purpose to present an analysis of the inguinal hernioplasty, made in the ambulatory surgery's unit and the degree of satisfaction of the patients, submitted to this surgery. It was made a retrospective study of 445 patients submitted to Lichtenstein's Hernioplasty, in the period between January 1994 and October 2000. From these, 420 (94.3%) were male and 25 (5.7%) were female patients, and the average age was 46,5 yr (14–84).

An evaluation was made from the following parameters from each patient: residence, profession, origin, time of waiting for the first consultation, time of waiting for the surgery, pathological antecedents, surgical antecedents of the abdominal wall and distribution through the years.

In relation to the surgical procedure, it was analysed, the type and median duration as also the type of anaesthesia and antibiotic profilaxys used.

On the post-surgery, it was evaluated the medium number of consultations (2.5), the time of follow-up (6 months) and the rate of complications (12%).

The authors present the results of a telephone inquiry (made when the patient had one year of post-surgery), where it was evaluated the presence of complications and the post-surgical pain degree, the inability period for labour, the quality of attendance and the satisfaction degree of the surgical patient.

The conclusions of the study are based on the results obtained, mainly the early and the late complications and the rate of recurrence, that in the present study was of 5 cases (1.12%). The authors conclude that this technique is a good procedure for ambulatory surgery.

#### 8c3

##### PAD: a new technique for hernia treatment

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**INTRODUCTION:** a new technique is here proposed for hernia treatment. Two polypropylene layers, differently shaped, are superposed and fixed opposite, on one side only, to allow movement of muscular and aponeurotic structures of the inguinal canal so to avoid dislocation, wrinkles and tension. During the first 24 h the prosthesis are allowed to slide and to find the proper position according to the patient's anatomical situation, protecting the inguinal canal by the separate and different action of the two prosthesis.

**MATERIALS:** One hundred and ninety two patients with primary inguinal hernia have been subjected to PAD procedure since 1998, in local anaesthesia and discharged the same day. None had problem or complications; one case of suppuration required local treatment with removal of the distal tail of the prosthesis with, anyway, no recurrence. No recurrence is actually evident and the use of analgesic was very poor; none patient required major analgesic and the assumption of tablet was mainly within the first 48 h. More than 50% of our series returned to normal day activities and to work within 7 days. The remaining within 8–15 days. None had orchitis or testicular atrophy, 6 patients required needle aspiration for seromas with recovery after 8–10 days, no hematoma.

**CONCLUSIONS:** recurrence rate is very low in all technique and does not permit discussion on comparison (although our follow up at 1 and 2 yr on 60 patients, is really interesting, at least in the short time), so new data must be considered in choosing the technique, such as comfort, postoperative period and recovery.

We find that PAD is easy to perform, safe, easy to duplicate and avoids most of the problem related with other operations, giving a comfortable postoperative period with very reduced pain. It is suitable in local anaesthesia and Day Surgery regimen. The patients asked were satisfied with their operation. (PAD: protesi autoregolantesi dinamica; self regulating dynamic prosthesis).

#### 8c4

##### **The ambulatory performed open suturless inguinal hernia repair**

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**AIM:** Our aim was to evaluate the advantages and disadvantages of the ambulatory performed open suturless inguinal hernia repair.

**METHODS:** In the two last years, we performed 120 open suturless mesh-plug inguinal hernia repairs (1.7% for recurrences) in 120 selected (no high-risk) patients under spinal anaesthesia. The suturless procedure was performed by utilizing a plug in addition to a mesh patch, which is placed into the subaponeurotic space. The hydrostatic pressure from both sides of the mesh seal it in place with no need of additional fixation. Thus total absence of tension is achieved. All patients were dismissed 3–6 h after the operation.

**RESULT:** All patients resumed their normal activities soon, the majority after 7 days. The complications included early superficial infections in 1 (0.8%), seromas in 4 (3.3%) and hematomas in 7 (5.8%). There were no recurrences noted. Oral analgetics (ketoprofen and tramadol) were used for the first preoperative days.

**CONCLUSIONS:** The results prove that the ambulatory performed procedure was safe since only a few minor complications occurred and in no case hospitalization was required. It can be regarded as the appropriate choice of repair for selected (no high-risk) patients. Important advantage is also easy and inexpensive performance.

#### 8c6

##### **Day surgery for primary inguinal hernia: personal experience**

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The authors report their experience in the treatment of primary inguinal hernias and introduce a modification of Trabucco's repair, which uses one or more plugs and a double layer polypropylene mesh. From January 1994 to May 2000, 1032 operations were carried out for inguinal hernia. 10008 patients received local anaesthesia (97.7%), 3 spinal (0.3%) and only 21 general anaesthesia (2%). The hernial defects were sized according to Gilbert's classification modified by Rutkow and Robbins: type I – 45 (4.4%), type II – 431 (41.8%), type III – 165 (16%), type IV – 156 (15.1%), type V – 20

(1.9%), type VI – 215 (20.8%). A classic Trabucco's repair was performed in 658 cases (63.8%); in the remaining 374, the larger defect required the use of two or more plugs (up to four). The posterior wall was reconstructed over the plugs with a continuous suture encompassing the transversalis fascia and a wing of the plug superiorly and the iliopubic tract inferiorly. The repair was immediately assessed by asking the patient to strain or cough. All patients operated on under local anaesthesia were up and about straightaway, had a meal shortly afterwards and were discharged within one day of operation. The following parameters were used to evaluate the method: analgesic requirements in hospital and at home (560 and 348 patients, 54.2% and 33.7%, respectively), postoperative complications (14 patients, 1.3%), driving and return to work of self-employed patients within five days (316 out of 419 and 107 out of 169 interviewed). During a follow-up of 3 to 74 months, only 2 recurrences have been recorded (0.19%). The proposed technique allows a calibrated reconstruction of the posterior wall associated with minimal pain, quick rehabilitation and early return to unrestricted work.

#### 8c7

##### **Abdominal hernia repair in cirrhotic patients a safe approach in one day surgery**

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**INTRODUCTION:** The treatment of hernias in cirrhotic patients is a very important topic because of a high rate of hernias among this patients and high complications rate.

**PURPOSE:** Our aim is to demonstrate that the repair of abdominal wall hernias in cirrhotic patients in one day surgery is a safe approach.

**METHODS AND PROCEDURES:** Between January 1998 and October 2000, we repaired 22 abdominal wall hernias in these patients (3 incisional, 6 umbilical and 13 inguinal) using various devices to reduce morbidity and mortality. We suggest that the abdominal cavity must not be opened. As prosthetic mesh, we use polypropylene or polyester meshes because of the size of the pores, which seems to be less prone to infections.

We classify the cirrhotic patients by the Child–Pugh classification because the complication rate and the eventual use of adjuvant devices such as human albumin, fibrin sealant (Tissucol®, Immuno, Hyland), platelet concentrate and helasto-compressive bandage depends on the stage of the disease.

We suggest that it is better to perform an antibiotic prophylaxis, which will help to avoid intraoperative contamination. If platelet count is < 40.000 and INR > 2, we administrate an intravenous platelet concentrate infusion and we spread human fibrin glue in the operative field between the prosthesis and the abdominal wall in the case of umbilical hernia and between the prosthesis and the posterior wall of the inguinal canal. Return home was possible within maximum 24 h after admission.

**CONCLUSIONS:** We concluded that abdominal wall hernia repair in one day surgery with the use of some adjuvant devices is safe.