

## Conference Abstracts

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# **Selected Abstracts**

## **X<sup>th</sup> Romanian-Serbian Surgery Conference**

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*Under the Patronage*

**ROMANIAN ACADEMY OF MEDICAL SCIENCES**

**SERBIAN MEDICAL SOCIETY – SURGICAL CHAPTER**

**ROMANIAN SOCIETY OF SURGERY**

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**SERBIAN MEDICAL SOCIETY – SURGICAL CHAPTER**

**CLINIC FOR ABDOMINAL, ENDOCRINE AND TRANSPLANTATIONAL SURGERY,**

**CLINICAL CENTRE OF VOJVODINA, NOVI SAD, SERBIA**

**UNIVERSITY OF MEDICINE AND PHARMACY OF CRAIOVA**

**ASOCIATIA PENTRU MEDICINA „PROF DR FLORIN BOGDAN”**

## 1. LAPAROSCOPIC ANTERIOR AND POSTERIOR SACROCOLPOPEXY FOR TOTAL GENITAL PROLAPSE

**Authors:** V. Șurlin, E. Georgescu, D. Mărgăritescu, Graure Georgiana, D. Rădulescu, S. Bordu, Mucenic Suzana, Croitoru Raluca, M. Bică

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**Background:** Laparoscopic approach of pelvic organ prolapse has gained more acceptance being increasingly preferred over vaginal route. Sacrocolpopexy (sacral colpopexy) is a surgical technique for repairing pelvic organ prolapse, feasible challenging for the skills of a laparoscopic surgeon.

**Case presentation:** We present the case of a 66 years old patient diagnosed with a 2<sup>nd</sup> degree genital prolapse. Physical general examination was without peculiar findings. Genital examination revealed second degree genital prolapse with trophic lesions and a discrete rectocele. Laboratory data and abdominal ultrasound and pulmonary x-ray didn't reveal any abnormality. Intervention was carried out by laparoscopy and a total hysterectomy with bilateral salpingo-oophorectomy was performed and an anterior and posterior sacrocolpopexy. Post operative evolution was normal and the patient was discharged on the 6<sup>th</sup> postoperative day. At 18 months of follow up patient is asymptomatic and with no recurrence of the disease.

**Conclusion:** Also in our experience this technique proved feasible and the postoperative results were satisfactory and up to expectations.

## 2. LAPAROSCOPIC SURGERY FOR BENIGN GENITAL DISEASES

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**Background:** Laparoscopy has become the treatment of choice in chronic genital diseases, with a high addressability in both gynecologic and general surgical departments.

**Methods:** This is a retrospective analysis of patients admitted for chronic genital pathology

in the 1<sup>st</sup> Surgery Department between 2008 and 2015.

**Results:** A total number of 400 patients (16.66% of the total number of laparoscopic procedures, 62.5% of the overall benign gynecological pathology) have been diagnosed with chronic genital diseases in our Department. The distribution of cases indicated: uterine fibroma - 50 cases; simple and complex endometrial hyperplasia - 12 cases; serous ovarian cysts - 120 cases; polycystic ovarian syndrome - 20 cases; hematic ovarian cyst - 41; ovarian endometrial cyst - 52; dermoid cyst - 30; hydrosalpinx - 75 cases.

The following procedures were performed by laparoscopy: total hysterectomy with bilateral adnexectomy - 58 cases; interadnexial hysterectomy - 4 cases; cystectomy - 148 cases; ovarian drilling - 20 cases; adnexectomy - 25 cases; salpingectomy - 60 cases; neosalpingostomy - 15 cases. The re-intervention rate was null. The morbidity rate was 4% (16 cases): macroscopic hematuria in 5 cases, local abscess in one case and intraperitoneal seromas in 10 cases. No postoperative mortality was registered. Mean hospital stay was 3.7 days.

**Conclusions:** The laparoscopic approach has become routinely used in general surgical departments for chronic gynecologic diseases, with good results in term of safety and cost-effectiveness.

## 3. THE FUTURE OF PANCREATIC PSEUDOCYST MANAGEMENT IN REGARD TO THE REVISION OF ATLANTA CLASSIFICATION

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Pseudocysts of the pancreas are localized peripancreatic fluid collections occurring in a late phases of acute pancreatitis. Its content is represented by enzyme-rich fluid without debris or minimal, because the revision of Atlanta classification separates the walled-off necrosis - a well-defined collection with necrotic and debris content from pancreatic pseudocyst. This was due to better understanding of its natural history based on the advent of ultrasound and computed tomographic scanning. The incidence of pseudocysts is noted to be higher as a result

of better diagnostic techniques. Pseudocysts must be suspected in patients who have persistent abdominal pain or consistently elevated levels of pancreatic enzymes. Nearly two-thirds of pancreatic pseudocysts resolve spontaneously. Some, however, require intervention. Surgery was the only option available for many years. Recently, newer methods, such as percutaneous drainage and endoscopic cystenterostomy, have been used. Percutaneous has a high risk for external fistula and for infection. Internal drainage is followed by better results in terms of recidive on long term. Experience with the endoscopic technique is steadily increasing, it may become not only a viable alternative but the first-choice procedure.

#### **4. POSTOPERATIVE EXTERNAL DIGESTIVE FISTULAS AFTER ESOGASTRIC SURGERY**

**Authors:** D. Rădulescu, V. Şurlin, I. Georgescu

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Anastomotic leaks after both esophageal and gastric cancer are a life-threatening condition that may result in mediastinitis/peritonitis and sepsis; have a reported mortality up to 64 %, with an average of 5-8% in case of eso-jejunal anastomosis; prolong hospitalization; prevent oral hydration and nutrition. Early postoperative leaks (2-3 days) are due to technical failure and late post-operative leaks (5-8 days) are usually due to ischemic changes at the anastomosis.

We reviewed classification, preoperative and intraoperative predictive factors, stapled versus hand-sewn anastomosis, predictive factors of mortality, treatment goals, key factors for successful closure, criteria for conservative treatment, endoscopic management and indications and principles of surgery, therapeutic algorithm and results of our experience.

Conclusions. Anastomotic leaks after gastric and esophageal resection continue to be a major source of mortality and morbidity in digestive surgery; there are no uniform methods for treating patients with symptomatic intrathoracic leakage; surgical treatment often is associated with poor results and considerable mortality; interventional endoscopic procedures may become an established therapeutic approach for intrathoracic anastomotic leaks.

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#### **5. BILIARY FISTULA IN SURGERY OF HEPATIC HYDATID CYST**

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Hepatic hydatid cyst remains a condition that involves a high social cost, in particular by higher average length of stay. It is known that the main factor that increases the duration of hospitalization is the development of postoperative complications, of which one is the most frequent postoperative biliary fistula.

In Clinical Surgery III Craiova, in the period 2005-2014 have been hospitalized and diagnosed with liver hydatid cyst, a number of 96 patients who underwent surgery. After treatment all these patients we recorded a total of 27 postoperative biliary fistulas. In this study we attempted to analyze the issues raised by biliary fistula, hepatic hydatid cyst surgery occurred in succession in terms of diagnostic methods and therapeutic possibilities.

#### **6. ETHICAL CONSIDERATIONS IN BARIATRIC SURGERY**

**Authors:** I. C. Puia, Bucerzan Paula, P. Puia  
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**Introduction:** We tried to present the viewpoints and highlight some specific aspects regarding obesity in Romania. This may be an important step in selecting some arguments that health professionals and decision makers may need to take into account regarding optimal obesity treatment in our country.

**Material and method:** Starting from a question based approach in ethics we selected those we considered relevant for moral issues connected to bariatric surgery. Between 2007-2015 we performed several types of bariatric approaches on 250 patients with an index body mass average of 42. The age span was 12-64 years. No deaths were recorded. Direct or phone

contact was possible with 90% of them. We present our experience linked to this activity.

**Results:** Regarding the informed consent a major problem is the lack of general knowledge necessary to support bariatric information. The low education level may allow only a partial comprehension of the benefits and risks of surgery leading to unrealistic expectations and poor decision making.

Inclusion criteria for bariatric surgery have to be adapted and more flexible.

Although we operated only 30 teenagers and no children we consider that lack of maturity and disharmonic family relations pose a series of challenges in assessing the best interest of children and adolescents.

Psychosocial evaluation is compulsory prior to bariatric surgery. For the last 4 years we have been recommending psychological testing to all our patients

A very serious ethical problem arises from the general economic problem stating that a physician in a situation of diminished income may create an artificial demand for his services. Patients that do not need obesity surgery should not be accepted for surgery.

Some patients hide the real type of operation or even conceal totally that they had a surgical procedure whatsoever. As a direct consequence some members of the family may be misleading in thinking that the cause is some consumptive disease.

The variability of procedures also appears to have substantial moral consequences. Handling a limited variety of procedures may expose patients to an unsuitable type of operation. Another limit may be the lack of specialized equipment for very heavy patients.

Patients are active on the forums on internet and their pressure may shift the selection of procedures towards more cheap or "fashionable" ones.

The huge majority of patients asks for a laparoscopic approach and consider themselves healthy so complications should be close to nil. All these factors make obesity surgery a subspecialty mastered by few surgeons in Romania. Combined with the increasing demand, the insufficient number of centers for bariatric surgery may put a supplemental pressure, both on physicians and on patients.

**Conclusion:** Too strict inclusion criteria and guidelines, unbalanced advertisement, and discrimination of gender, fitness, age and ethnicity may lead to an unjust distribution of bariatric surgery.

## 7. LAPAROSCOPIC MANAGEMENT OF SEVERE FORMS OF ACUTE CHOLECYSTITIS

**Authors:** T. Bratiloveanu, E. Georgescu, Ș. Pătrașcu, S. Râmboiu, S. Săndulescu, S. Toma, V. Băleanu, A. Săpunaru, Popescu Adina, D. Belivacă, I. Georgescu

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**Introduction:** Upon increasing surgical experience, the indication of the laparoscopic approach for acute cholecystitis was widely broadened, the majority of cases being solved this way as often as possible.

**Material and methods:** The clinical study was conducted between 2009-2014 in our department. There have been analyzed a total of 1496 cases of acute cholecystitis with surgical indication, of which 680 (45.45%) acute and 916 (54.55%) chronic. We have followed the anatomo-clinical aspects, intraoperative incidents and accidents, cases with conversion and postoperative complications.

**Results:** Laparoscopic approach was performed in 89.75% of cases with a conversion rate of 10.29%. Gangrenous forms were found in 217 cases (31.9%). The common incident during surgery was the perforation of the cholecyst during dissection - 80 cases (11.74%). Injury of the common bile duct was recorded in 2 cases (0.29%). The main cause of conversion was the pericholecystic adherential block in 30 cases (4.4%). Postoperative mortality was 0. The most important prognostic factor for conversion was the intensity and the severity of the vesicular and perivesicular inflammatory process. Other risk factors are represented by sex, age, surgery performed after more than 4 days from the onset the symptoms diseases and surgeon's experience. This procedure is reliable, confirmed by the low incidence of the common bile duct: 0.29%, postoperative morbidity of 8% and mortality 0.

**Conclusions:** Our results confirm that the laparoscopic approach is appropriated also in cases of acute cholecystitis, with a success rate of almost 90%. Although the conversion rate was higher in gangrenous forms of acute cholecystitis, the technique maintains its minimal invasive advantages and we consider that all the patients should benefit of laparoscopic approach.

## **8. UPDATE OF FAST-TRACK APPROACH IN LAPAROSCOPIC VS OPEN COLORECTAL SURGERY**

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**Aim:** observing the impact of fast-track protocol on postoperative outcome for colon cancer patients and to compare the positive outcome for patients undergoing laparoscopic and open colorectal surgery

**Material and method:** prospective study of 234 colon cancer patients divided in 3 groups: group I (open surgery with fast track) - 98 patients; group II (traditional approach) – 78 patients and group III – 60 patients that underwent laparoscopic surgery. We analyzed postoperative morbidity and mortality, duration until bowel movement, hospital stay and costs.

**Results:** Postoperative morbidity similar for groups I, II and III with significant differences between groups I and II regarding duration until bowel movement (28 hours for group I vs 65 hours for group II), hospital stay (5,7 days for group I vs 9,1 days for group II) and costs (30% lower for group I compared to group II) and with no significant differences between groups I and III.

**Conclusion:** Open colon cancer surgery with fast track protocol has similar results with laparoscopic surgery regarding postoperative morbidity and mortality, as well as decreasing costs and hospital stay.

## **9. PLACE OF ND:YAG AND CO2 LASERS IN SURGERY**

**Authors:** G. Ianoşi, Simona Ianoşi

Medical Center Dr. Ianoşi, University of Medicine and Pharmacy of Craiova

**Introduction:** Many lesions including vascular lesions, especially those occurring in visible sites, but also cutaneous tumors represent the perfect target for laser therapy. In this field, the introduction of compact and more affordable devices, usually for an outpatient setting allowed for easier patient access with more reliable and cosmetically pleasing results. The aim of this presentation is to demonstrate our 6 years of experience in treating surgical lesions with two devices: an Nd:YAG and a CO2 lasers.

Patients. There were 286 patients with leg veins (462 legs) treated with an Nd:YAG laser device (StarLux 500 from Palomar Inc. USA) and 2425 patients with different cutaneous tumors (4866 tumors) treated with an CO2 laser. We evaluated adverse effects and also the cosmetic results. The immediate clinical endpoint is subtle dusky purpura without signs of epidermal damage, such as grayish discoloration. Patients may also develop moderate itching-like edema, erythema, transient post-inflammatory hyperpigmentation, rarely erosions, especially with CO2 lasers.

**Discussions:** A large variety of vascular specific lasers and light devices have been developed over the years. All of the systems currently in use are based on the principles of selective photothermolysis introduced by Anderson and Parrish.

Nd:YAG laser's chromophores are hemoglobin. Heating it, these devices are able to destroy the vessel wall with impressive clinical results.

Water is the target of CO2 lasers and they are able to vaporize cutaneous tumors with less possible scars.

### **Conclusions:**

1. Even ambulatory phlebectomy and sclerotherapy remain the gold standard for treatment of telangiectatic leg veins, sclerotherapy may not be feasible in patients with needle phobia, allergies to components of sclerosants, popliteal fossa or ankle telangiectasias and telangiectatic matting but also in lesions under 3 mm in diameter where millisecond domain Nd:YAG lasers become the first choice.

2. Cosmetic results after treatment with CO2 lasers and its short learning curve encourage treatments with these devices.

3. As new therapies emerge, treatment of vascular lesions and cutaneous tumors will likely continue to improve with higher clearance rates, faster resolution and fewer adverse effects.

## **10. LAPAROSCOPIC MANAGEMENT OF MESENTERIAL GASTRIC VOLVULUS**

**Authors:** S. Râmboiu, T. Bratiloveanu, S. Săndulescu, Marinescu Daniela, A. Săpunaru, M. Lazăr, A. Gogăna, Graure Georgiana, V. Şurlin

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**Abstract:** A 48-years old woman, with a surgical history of left ovariectomy and appendectomy, was admitted in our surgical department, for severe epigastric pain, retching without vomiting, heartburn and weight loss, despite a two years of treatment with antisecretory drugs. Physical examination was revealed an upper abdominal distention with epigastric tenderness, without any clinical sign of acute abdomen. Upper endoscopy revealed a 4 cm sliding hiatal hernia and esophagitis. Upper GI series test showed an intermittent organoaxial gastric volvulus with the stomach rotated around its cardio splenic axis and without a visible gastroesophageal reflux. The patient was proposed for a laparoscopic intervention and intraoperative examination confirmed the sliding hiatal hernia of 4-5 cm and a gastric volvulus. Pelvic examination revealed a left ovary with 2 cysts (one hemorrhagic and the other one serous). We performed a laparoscopic left adnexectomy, repaired the hiatal hernia using a Nissen-Rossetti fundoplication and an anterior gastropexy - Boerema type - for gastric volvulus. Postoperative, the gastric decompression was maintained for 36 hours, until return of bowel function. The patient was discharged without any recurrence of symptoms during a 6-months follow-up.

## 11. IMPROVEMENT IN THE AESTHETIC-PSYCHIC RELATIONSHIP IN PATIENTS WITH BARIATRIC SURGERY

**Authors:** I. C. Puia, P. G. Cristea, Aida Puia “Octavian Fodor” Gastroenterology and Hepatology Institute Cluj-Napoca, 3<sup>rd</sup> General Surgery Department

**Objective:** The study aims to compare in a retrospective manner the three procedures used in our clinic for the surgical treatment of obesity: Laparoscopic Adjustable Gastric Banding (LAGB), Laparoscopic Sleeve Gastrectomy (LSG) and Laparoscopic Gastric Plication (LGP).

**Method:** 202 patients were surgically treated for obesity in our clinic between 2008 and 2013: 81 chose LAGB, 107 LSG and 14 LGP. They all respected the indications for bariatric surgery, with either a body mass index (BMI) over 40, or one over 35 complicated with comorbidities (hypertension, diabetes, dyslipidemia, sleep apnea). The parameters followed were the age, gender, the variation of

the BMI, the evolution of obesity-related comorbidities.

**Results:** The quality of life improvement is the main reason the patient will undergo a bariatric surgical procedure. The best way to objectify this improvement is by using the BAROS and Moorehead-Ardelt questionnaires, which quantify the weight loss, the evolution of co-morbidities, complications and reinterventions, and the evolution of the self-perception of the patient. The LSG has proven to be the best choice for long term weight loss (18.92% of the patients have lost more than 60% of the excess body weight in 2 years or more), while the LAGB has yielded the most constant results in improvement of the comorbidities. Also, the aggregated analysis of the results has shown that patients that underwent LSG score significantly higher than the other two procedures on both the Baros and Moorehead-Ardelt questionnaires.

**Conclusions:** The LSG offers the best quality of life improvement both through objective results and patient perception. Patients that underwent LAGB also had to suffer minor interventions, from calibration to foreign material rejection complications, which greatly decreases the patient satisfaction.

## 12. LAPAROSCOPIC ADRENALECTOMY – INITIAL EXPERIENCE

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**Introduction:** Recent advances in surgical technology and the need to decrease morbidity and reduce hospital stay have led to a rapid progress in laparoscopic adrenalectomy (LA) over the past decade. The safety and efficacy of laparoscopic adrenalectomy have already been demonstrated by several reports. Beginning with 2013 we have also started performing laparoscopic adrenalectomy in our department for selected benign adrenal tumors.

**Method:** Between 2013 and 2015, 6 LA were performed for selected adrenal tumors, 4 on the left side (66%) and 2 on the right side (33%). Selection criteria included unilateral, small (< 5 cm) adrenal tumors in patients without previous abdominal surgery. All patients have been diagnosed and prepared for

surgery according to actual recommendations, together with the endocrinologist and anesthesiology team. We used the trans peritoneal laparoscopic approach for all patients, using 3 working trocars and 1 optical trocar. The adrenal gland was extracted using limited incisions at trocar site.

**Results:** LA was performed for 5 male and 1 female patients, with a mean patient age of 54.5 years. Adrenal tumors ranged from 2.5 to 5 cm (mean 3.75 cm). Average operating time was 167 minutes with a decreasing trend over time (from 218 min to 132 min). Surgical complications included ileus (1 patient), abdominal wall pain (1 patient) and significant bleeding that required transfusion and conversion to open surgery (1 patient). Hospital stay was 3.8 days (3-6 days), lower than for patients with open adrenalectomy (8-10 days).

**Conclusions:** Shorter convalescence and hospital stay, decreased blood loss and overall morbidity as well as improved cosmetic results are obvious advantages of laparoscopic adrenalectomy which is now considered the gold standard for the treatment of small functional benign adrenal tumors. Accumulated experience over time will lead to even better surgical results and extend the indication of LA to large tumors, pheochromocytomas and even localized malignant tumors.

### **13. LAPAROSCOPIC SURGERY OF COLO-RECTAL CANCER – INITIAL EXPERIENCE**

**Authors:** I. Georgescu, V. Şurlin, S. Râmboiu, D. Mărgăritescu, S. Pătraşcu, F. Cioară, D. Cârţu, S. Bordu, Duică Larisa, M. Bică

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**Aim:** to present the first cases of colon cancer that underwent laparoscopic surgery and to study the advantages in postoperative outcome, hospital stay and costs that are associated with laparoscopic colic surgery.

**Material and method:** between 2012 and 2015 there were 17 patients with colon cancer that underwent laparoscopic surgery. There were 10 patients with right colon cancer and 7 patients with left colon cancer. We performed 10 right colectomies, 4 sigmoidectomies and 3 left colectomies. Mean duration of surgery was 2 hours and 15 minutes. Postoperative morbidity included 4 cases of wound infection and 1 case of postoperative fistula after left colectomy that

was treated conservative. Postoperative mortality was 0. Mean hospital postoperative stay was 5,7 days.

**Conclusion:** laparoscopic approach in colon cancer surgery is associated with fast postoperative recovery and low morbidity and mortality rates and can become a better treatment for colon cancer patients.

### **14. LAPAROSCOPIC VERSUS OPEN RADICAL NEPHRECTOMY**

**Authors:** A. Pănuş, G. Mitroi, O. Drăgoescu, C. Mititelu, A. Drocaş, P. Tomescu

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**Introduction:** In the last decades, due to significant technological advances laparoscopic radical nephrectomy (LRN) has gradually become the standard treatment for kidney tumors worldwide. After gaining laparoscopic experience, during the last 2 years we have started performing LRN in our urology department.

**Objective:** To evaluate the safety and efficacy of laparoscopic radical nephrectomy (LRN) compared to classic open radical nephrectomy (RN) in our experience.

**Method:** A total of 46 localized kidney cancer (T1-T2) patients were treated by RN between 2013 and 2015. Based on several selection criteria (tumor size < 7 cm, no previous abdominal surgery, patient preference), 21 patients were treated by LRN while 25 patients by RN. We used the transperitoneal laparoscopic approach for all LRN patients, using 3-4 working trocars and 1 optical trocar. The tumoral kidney was extracted using incisions between trocar sites or right/left lower quadrant incisions.

**Results:** Average patient age was 64.8 years and 63% were males. Mean tumor size was 7.1 cm and significantly lower for the LRN patients (5.2 cm) than the RN patients (8.6 cm) due to patient selection, while tumor location was mostly on the left side (57%) and lower pole (62%) for LRN patients due to the same criteria. Average operating time was higher for LRN (177 min) than RN (146 min) ( $p < 0.05$ ), but a gradual decrease in LRN OR time was noted. Intraoperative complications were significantly lower for the LRN group (14%) than for the RN group (24%), but 2 conversions to open surgery were recorded in the LRN group (9.5%). Postoperative complications were similar for both groups (26%). Hospital stay was lower ( $p <$

0.05) for the LRN group (5.5 days), compared to patients with RN (8.1 days).

**Conclusions:** Laparoscopic radical nephrectomy is a safe and efficient method for the treatment of localized kidney cancer with shorter hospital stay, reduced blood loss and overall morbidity as well as improved aesthetic results that can be used successfully after a relatively short learning curve.

### 15. PERFORATED PEPTIC ULCER – COULD LAPAROSCOPIC SURGERY BECOME “GOLD STANDARD” IN OUR CLINICAL PRACTICE?

**Authors:** M. Bică, D. Cârțu, S. Săndulescu, D. Mărgaritescu, E. Georgescu, A. Săpunaru, L. Barbu, A. Gogănu, D. Rădulescu, V. Șurlin  
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**Aim:** study of laparoscopic approach as a possible gold standard treatment in perforated ulcer peritonitis.

**Material and method:** prospective study of a group of 54 patients with diffuse peritonitis caused by perforated ulcer that underwent laparoscopic emergency surgery. We followed the duration of the surgical procedure, duration of hospital stay, postoperative morbidity and prognosis. As control group we studied 50 patients with perforated ulcer that underwent open emergency surgery.

**Results:** We performed 43 sutures of the perforation with omentoplasty. 11 patients needed conversion to open surgery because of previous interventions in the upper abdomen (4 patients) or because of a long duration from the onset of peritonitis (7 patients). Mean duration time of surgical procedure was 1 hour and 6 minutes. Mean hospital stay was 4,7 days. Postoperative morbidity was significantly lower in the laparoscopic group compared with the open group. A 4 weeks endoscopic follow-up was possible for 38 patients out of the 54 patients in the laparoscopic group and revealed a good prognosis for all 38 patients.

**Conclusion:** laparoscopic approach can be a new gold standard for the emergency surgery of perforated ulcer.

### 16. LAPAROSCOPIC TRANSPERITONEAL PYELOPLASTY

**Authors:** G. Mitroi, A. Pănuș, A. Drocaș, O. Drăgoescu, P. Tomescu  
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**Introduction:** Due to the proven advantages of laparoscopic surgery, transperitoneal laparoscopic pyeloplasty has gradually replaced the open procedure.

**Patients and Methods:** Between 2013 and 2015, 15 patients with congenital pyelo-ureteral junction (PUJ) obstruction were treated in our department by laparoscopic pyeloplasty using the transperitoneal Hynes-Anderson type approach. 9 patients had left PUJ obstruction (60%) and 6 had right PUJ obstruction (40%). 2 patients had a history of abdominal surgery before addressing our department (13%). Laparoscopic procedures were generally performed using 2 working trocars and 1 optic trocar, but in 6 cases a third working trocar was necessary (40%).

**Results:** Average time for surgery was around 150 minutes, but gradually decreased due to surgical experience. Running 4.0 polyglycolic acid sutures were used for pyelo-ureteral anastomosis in 10 cases (66%). An antegrade double J ureteral stent was placed during the laparoscopic procedure for 11 patients (73), while the other 4 patients had the stent placed retrograde by cystoscopy before or after the procedure. Average hospital stay was 2.6 days compared to 7-8 days for open surgery (8 days). Abdominal drain was generally removed after 2 days and the double J stent was removed after 3-4 weeks. Minor complications were abdominal wall pain (due to pneumoperitoneum) or ileus while significant complications occurred only in 3 cases (20%): prolonged drainage and urinary tract infection.

**Conclusions:** Laparoscopic Hynes-Anderson pyeloplasty has multiple advantages, comparative with the open approach. Cosmesis, hospital stay, and society integration is significantly improved using laparoscopic approach for this type of interventions.

### 17. TOTAL PARATIROIDECTOMY FOR SECONDARY HYPERPARATHYROIDISM IN END STAGE RENAL DISEASE SECONDARY TO ALPORT SYNDROME

**Authors:** Marinescu Daniela, S. Râmboiu, T. Bratiloveanu, S. Bordu, A. Gogănu, Rădulescu Mihaela, D. Rădulescu, Popescu Adina, R. A-Tomei, V. Șurlin

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**Introduction:** Patient with chronic renal failure in uremic stage shows disorders of the phosphocalcic metabolism with secondary hyperparathyroidism, osteopathy and calcifications requiring secondary parathyroidectomy.

**Material and methods:** 37 years old patient with Alport Syndrome, uremic stage nephropathy and hearing impaired. The patient is on hemodialysis for about 9 years, and on treatment for secondary hypertension, anemia and secondary hyperparathyroidism. Osteopathy with PTH > 1000 pg/ml.

**Results:** The patient does not respond to conservative treatment of the phosphocalcic metabolic disorders and given the major osteoarticular pain associated with PTH > 1000 pg/ml total parathyroidectomy is required. During preoperative care thrombocytopenia is discovered, which is a contraindication to surgery. Hematological assessment reveals macro- thrombocytopenia secondary to Alport Syndrome without coagulation disorders, hemostasis proved to be efficient after hemodialysis.

**Conclusion:** Thrombocytopenia in patients with indication for elective surgery should be weighed and not always corrected, estimating thrombocytopenia types like macro- thrombocytopenia of Alport syndrome which does not involve bleeding risk or coagulation disorders.

## 18. INTESTINAL OBSTRUCTION BY FOREIGN BODY INGESTED

**Authors:** B. Perșu, C. D. Vidrighin

Department of General Surgery, Municipal Hospital of Caracal, Romania

**Introduction:** Ingested foreign bodies presents many problems due to associated complications, including stenosis and perforation are the most common.

**Methods:** We report the case of a man aged 36 years admitted through the emergency room for diffuse abdominal pain, absence of bowel movements for about 48 hours, vomiting and presence of a palpable tumor formation in the region right periumbilical with muscular defense in this area. Mentioned that the patient was treated after about 2 weeks for appendicular plastron.

**Results:** Surgical has occurred and it has been found an irregular tumor terminal ileum and ileocecal valve with distended bowel loops, "fighting" hard bounded. It was decided and

performed right hemicolectomy with anastomosis ileo-transverse T-L. On sectioning track operators discovered a conglomeration of olive pits. Postoperative evolution was slowly favorable encumbered by the appearance of a small flow anastomotic fistula which resolved conservatively. The patient was discharged 16th day after the operation.

**Conclusions:** Occlusions by seed ingested are relatively rare and preoperative diagnosis raises serious problems.

## 19. PANCREATIC HEAD NEUROENDOCRINE TUMOR – DIAGNOSTIC AND THERAPEUTIC ALGORITHM

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**Introduction:** Pancreatic neuroendocrine tumors include a variety of histologic subtypes, one of them being represented by insulinoma, generally a benign tumor (90%).

**Material and method:** 33 years old female patient, admitted in the Clinical County Emergency Hospital of Craiova for clinical manifestations of severe neuroglycopenia associated with non-pruriginous facial and upper body rash ceasing after administration of glucocorticoids. Symptoms started 2 years ago and worsened in the last 6 months. Laboratory tests revealed severe hypoglycemic episodes under 50 mg/dl associated with inadequately elevation of serum insulin. Imaging tests (MRI, EUS) revealed a 2/1.5 cm tumor situated in the uncinate process of the pancreatic head in close contact with the superior mesenteric vein without invasion, with no other detectable secondary lesions in the pancreas or any other abdominal viscera. Thyroid and adrenal glands were of normal aspect. Fine needle aspiration under EUS guidance and cytology revealed suggested a neuroendocrine pancreatic tumor

with benign cells, which was interpreted as insulinoma, supported by clinical and laboratory data. Scheduled surgery consisted in enucleation of the tumor under meticulous hemostasis, avoiding damage to the main pancreatic duct.

**Results:** Postoperative course registered a delayed gastric emptying syndrome that regressed after administration of prokinetics and a prolonged febrile syndrome that resided after broad spectrum antibiotics.

**Conclusions:** Pancreatic neuroendocrine tumors represent a peculiar category of tumors of which diagnostic and therapeutic management needs a multidisciplinary approach.

## 20. LONG TERM RESULTS OF PHOTODYNAMIC DIAGNOSIS AND TREATMENT OF NON-MUSCLE INVASIVE BLADDER CANCER USING HEXAMINOLEVULINIC ACID

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**Abstract:** Bladder cancer (BC) is currently the fourth most frequent malignant disease accounting for 5-10% of all malignancies and the most common tumor of the urinary tract. Diagnosis of bladder cancer is based on urine cytology and white light cystoscopy (WLC) performed for patients with suspected bladder mass and/or hematuria. Recent studies suggest that using the fluorescence photodynamic diagnosis (PDD) significantly improves diagnostic sensitivity with a positive influence upon the recurrence rate of bladder cancer.

**Objective:** To evaluate the diagnostic efficiency and long-term influence upon the tumor recurrence rate for patients with non-muscle-invasive bladder cancer (NMIBC) undergoing hexaminolevulinate photodynamic diagnosis (PDD) compared to standard white light cystoscopy (WLC).

**Method:** Between March 2009 and December 2010, 113 consecutive NMIBC patients were enrolled in our prospective study and randomized in two parallel groups: 57 patients in the study group (PDD) and 56 patients in the control group (WLC). All patients had primary Ta, T1 non muscle-invasive bladder cancer with good life expectancy and no significant bladder outlet obstruction (PVR <100 ml).

**Results:** No significant differences were found between the two groups regarding patient age, sex, place of origin, smoking history, clinical symptoms or presence of urological history as well as tumor size, location or number. Fluorescence cystoscopy examination identified 26.3% more tumors than the conventional white light examination ( $p = 0.034$ ). We also demonstrated a significant reduction of tumor recurrence rates by up to 19% after 5 years by using PDD (HR = 0.566, 95% CI 0.343 – 0.936;  $p = 0.027$ ).

**Conclusion:** The use of PDD for patients with NMIBC results in over 25% diagnostic sensitivity improvement as well as superior patient prognosis and quality of life following conservative treatment by reducing the tumor recurrence rate with up to 19% after 5 years of follow-up.

## 21. INTRAOPERATIVE CARDIOVASCULAR RESPONSE IN TRANS GASTRIC NOTES VERSUS LAPAROSCOPY

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**Background:** Natural orifice transluminal endoscopic surgery (NOTES) is emerging as a new alternative method in minimal invasive

techniques. Although a small number of studies have compared the physiologic response in NOTES to laparoscopy the results remain controversial.

**Aim:** This experimental study aims to evaluate the intraoperative cardiovascular effects during transluminal natural orifice surgery and conventional laparoscopy.

**Method:** Twenty female pigs (*sus scrofa domestica*) divided in two study groups were assigned to either natural orifice transluminal endoscopic techniques (group 1, n=10) or to conventional laparoscopic surgery (group 2, n=10) and monitored intraoperatively in terms of heart rate (HR), systolic blood pressure (SBP) and O<sub>2</sub> saturation (SpO<sub>2</sub>) for one hour. Both groups underwent simple surgical procedures such as oophorectomy and adnexectomy.

**Results:** All procedures were successfully completed. The findings indicated statistically significant differences between systolic blood pressure (p=0.0065) and SpO<sub>2</sub> (p=0.027) in the two groups at the beginning of the interventions. Heart rate showed significant differences during the last 20 minutes of the interventions (min. 40, 45, p<0.001). For the whole procedure (min. 0-60) HR, SBP and SpO<sub>2</sub> values showed no statistical difference.

**Conclusion:** Although significant differences in terms of heart rate, mean blood pressure and O<sub>2</sub> saturation were noted at specific intervals during surgery, no real variance of the cardiovascular parameters was observed when considering the entire procedure.

## 22. CORRELATIONS BETWEEN INTRA-TUMORAL MICRO VESSEL DENSITY AND HISTOPATHOLOGICAL TYPE OR NEOADJUVANT RADIOTHERAPY FOR RECTAL CARCINOMA

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**ABSTRACT: Purpose:** This study aims to evaluate intratumoral micro vessel density in rectal carcinoma cases with different histopathological type (adenocarcinoma and mucinous carcinoma) and different preoperative neoadjuvant radiotherapy status (irradiated / non-irradiated), thus analyzing any possible statistical correlation between these parameters.

**Material and methods:** Our prospective study consists in standard immunohistochemistry procedures using CD34, CD31 and CD105 antibodies, which were performed on 25 samples of rectal carcinoma, in order to determine intratumoral micro vessel density.

**Results:** The 25 case study group was divided either by histopathological type or by prior radiotherapeutical treatment as follows: 9 cases of mucinous carcinoma versus 16 cases of adenocarcinoma and 13 cases of rectal cancer that have not received neoadjuvant radiotherapy versus 12 cases of rectal cancer with preoperative radiotherapy.

**Conclusions:** The number of intratumoral micro vessels is higher in non-irradiated rectal tumors and in adenocarcinomas, this remark being statistical significant (with only one exception – CD34 staining in non-irradiated versus irradiated tumors) for all types of vessels (new-grown and mature).

This result is due to the benefic effect of neoadjuvant radiotherapy on decreasing angiogenic activity, thus having an important prognostic value for rectal cancer.

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## 23. LIPOSARCOMA OF THE SPERMATIC CORD: A REPORT OF FIVE CASES AND REVIEW OF LITERATURE

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Liposarcoma of the spermatic cord is a rare neoplastic disease. Scrotal masses can be

paratesticular and testicular. Paratesticular masses are usually benign and 77% of benign tumors arising from epididymis. Primary malignancy of the epididymis is rare and microscopically these are adenocarcinomas. Spermatic cord liposarcomas are a rare soft tissue malignancy that accounts for 3% to 7% of all sarcomas with poor prognosis and aggressive behavior. Regarding histology, paratesticular liposarcomas, according to the 2002 World Health Organization, can be divided into five categories: well-differentiated (atypical lipomatous tumor), pleomorphic, myxoid or round cells, dedifferentiated and mixed-type liposarcoma. Objective of this review is that these paratesticular liposarcomas must be part of the differential diagnosis of scrotal mass and management of these malignant tumors has been difficult because of their rarity and is low consensus regarding adjuvant treatment strategies and optimal surgical treatment.

We studied 5 cases of spermatic cord liposarcoma and in 1 case immunohistochemical expression of a panel of antigens (p16 proteins, desmin, smooth muscle actin, S100 protein,  $\beta$ -catenin). Paratesticular liposarcoma histology was well differentiated for 2 patients, dedifferentiated for 2 patients and liposarcoma with hemangiopericytoma like areas. All 5 patients underwent radical orchiectomy with local excision of the mass and adjuvant radiotherapy can be considered in intermediately or highly differentiated tumors and recurrent liposarcomas, while the role of chemotherapy is not well-defined.

In conclusion liposarcomas of spermatic cord are rare neoplasms that present as palpable, slow-growing, firm paratesticular masses. Imaging techniques such as scrotal CT, MRI and ultrasonography should be used before surgery, to evaluate these tumors. The curative treatment is radical orchiectomy with high cord ligation and wide excision of surrounding soft tissue structures. Because local recurrence is common, long-term follow-up periods are recommended.

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Agency for Higher Education Research Development and Innovation Funding (UEFISCDI).

#### 24. GASTRIC CANCER - STATISTIC ASPECTS REGARDING THE EXPERIENCE OF SECOND SURGICAL CLINIC OF EMERGENCY COUNTY HOSPITAL FROM CRAIOVA

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**Introduction:** Gastric cancer is characterized by a prognosis of extreme gravity. It is the fourth most common cancer worldwide, with high mortality which makes it the second cause of decease.

**Material and method:** The study was performed on a group of 318 patients hospitalized in Second Surgical Clinic from Clinical Emergency County Hospital from Craiova, on a period of 10 years – from January 2004 until October 2014. There were performed total and subtotal gastrectomies with associated D1 and D2 lymphadenectomies as well as palliative gastric resections. Data were obtained from the study of observation sheets, operative protocols and anatomopathological results. Postoperative mortality evaluated by the study was that registered during hospitalization. Gastric cancer TNM staging was made using the 6th edition of AJCC/UICC classification. Statistic work used Student and chi-Square tests and Odds Ratio.

**Results.** Distribution on sexes registered higher incidence for men in the 7th decade of life. Most frequent topography was antral followed by the upper gastric pole. Most of the interventions were for palliative reason, resectability rate was 68,66%. Resections with curative intention were performed in less than half of resectable cases. General postoperative morbidity was quite high – 17,25% - with a percent of 23% in the group with resectable tumors. Most common morbidity cause was anastomotic dehiscence. Associated splenectomy determined a significant higher

morbidity rate. Postoperative mortality was 2,8%. Correct pTNM staging was possible in 18% of resectable cases.

**Conclusions.** Postoperative morbidity did not register significant differences compared to other similar studies from our country. It was significant higher when splenectomy and distal pancreatectomy were performed. Associated extended lymphadenectomy was not correlated with considerable higher morbidity ( $p=0.966$ ).

Postoperative mortality was similar with citations in most of similar studies.

Gastric cancer surgery still has high postoperative morbidity and mortality rates due to the advanced stage of disease when therapeutic options are limited.

## **25. RETROPERITONEAL SCHWANOMA – PROBLEMS OF DIAGNOSIS AND TREATMENT IN A PATIENT WITH BREAST CANCER UNDERGOING MULTIMODAL THERAPY**

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**Introduction:** Breast cancer causes remote lymphatic, vascular and peritoneal metastasis. Of these metastasis the most common are located in the liver, lungs, brain and spine through the Batson venous plexus.

**Material and method:** Female patient aged 42 years, collateral hereditary antecedents - mother died of breast cancer, nulliparous during premenopause is operated for breast cancer - T1N0M0. Quadrantectomy with axillary lymph node dissection was performed followed by chemo-radiotherapy. Subsequent abdominopelvic computer tomography follow-up reveals a retroperitoneal tumor located at the junction between the right renal vein and the inferior vena cava.

**Results:** The patient has surgical indication for the suspicion of retroperitoneal metastasis and also for concurrent oophorectomy for ablative hormone therapy. In the retroperitoneum, attached to the wall of the inferior vena cava is discovered a parietal encapsulated tumor, with a 6 cm diameter which is excised without residual tumor tissue. Anatomopathological examination reveals Schwannoma without cellular atypia.

**Conclusion:** Retroperitoneal metastasis is infirmed in the case of a stage IA breast cancer prior to treatment, this type of metastasis is unusual in breast cancer. Imagistic methods part of the oncological screening programme can reveal preexisting benign pathology.

## **26. THE TREATMENT OF MIDDLE AND LOWER RECTAL CANCER**

**Authors:** T. Burcoş, S. Stănilescu, D. Cristian, F. Grama, Denis Aslan

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**Aim:** Systematization of middle (MRC) and inferior (IRC) rectal cancer treatment, based on our experience and reported to the literature.

**Material and method:** We retrospectively analyzed 147 cases hospitalized in our department between 2007-2011: 86 patients with CRM (58,5%) and 61 patients with IRC (41,49%).

90 patients received neo-adjuvant treatment and for 57 patients the treatment started with surgery (patients with Tis / T1N0, emergency or neoadjuvant treatment contraindications).

Initial radiotherapy (90 patients): Long treatment 61 patients (45 Gy in 5 weeks) and 29 patients short treatment (25Gy in 5 days).

Surgical treatment was local (transanal excision, endoscopic mucosal) for 9 patients with noninvasive cancer. For the remaining 138 patients (93.8%) with invasive neoplasia we performed low anterior resection with anastomosis (72), amputation of the rectum (47), resection type Hartmann (11) or colostoma (17).

We performed protective ileostomy in 58 patients (80.55%) of the 72 with low anterior resection.

Patients with R1 or R2 resections (21) and patients with node-positive histopathology (76) received chemotherapy.

Postoperative complications: fistulas (7) evisceration (1), peritonitis (7) wound suppurations (18), urinary disorders (25), general complications (13). Mortality: one patient.

**Conclusions:** Balance before treatment allows complete and correct staging a multimodal adequate treatment. Tumors T3, T4 benefits of neoadjuvant chemo radiotherapy allowing down staging facilitating sphincter preservation and avoiding of local recurrence.

## 27. THE TREATMENT OF THE ESOPHAGEAL CANCER. CONSIDERATIONS UPON 33 OPERATED CASES

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**Aim:** to improve the surgical treatment of the esophageal cancer  
**Material and method:** 49 consecutive patients with esophageal cancer (46 men and 3 women, 63 years old on average), admitted and treated in 1st Surgical Department Craiova in the last 10 years (2005-2014) were analyzed from therapeutic point of view. 33 (67,3%) were operated on, 19 by palliative procedures (15 gastrostomies, 1 jejunostomy and 3 endoscopic prosthesis) and 14 suffered radical surgery (8 superior polar esogastrectomies, 4 total esophagectomies and 2 patients partial distal esophagectomies).

**Results:** postoperative morbidity: 6 cases with anastomotic leakage and 2 general complications. Postoperative mortality – 4 deaths out of 14 interventions. 2 patients with tumor recurrences.

### Conclusions:

1. The treatment of esophageal cancer is complex and multimodal, surgery being the main therapeutic sequence.

2. Neoadjuvant chemo- and radiotherapy followed by surgery represents the standard algorithm for operable stages.

3. Surgery (esophagectomy + lymphadenectomy) represents the gold standard both for the stages I and II and for the locally advanced resectable cancers; the tumor's location, the invasion degree of the esophageal wall and the local and regional extension were the criteria for choosing the surgical approach, the extension of the resection and the manner of restoration of the digestive transit.

4. Palliative procedures together with adjuvant chemo and radiotherapy represent the gold standard of the treatment in locally advanced and systemic disease.

## 28. SIMULTANEOUS GASTRIC AND SMALL BOWEL TRICHOBEZOAR – RARE CAUSE OF BOWEL OBSTRUCTION

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**Introduction:** Trichobezoars (hair ball) are usually located in the stomach, but may extend through the pylorus into the duodenum and small bowel (Rapunzel syndrome). They are almost always associated with trichotillomania and trichophagia or other psychiatric disorders. In the literature several treatment options are proposed, including removal by conventional laparotomy, laparoscopy and endoscopy.

**Case presentation:** Female, 45 years old, with clinical symptoms of gastric obstruction. Clinical examination identifies distension of the epigastric region, local pain. Biological evaluation- increased the number of leucocytes. Abdominal ultrasound is normal. CT scan-bowel obstruction. Gastroscopy- esophageal candidosis, giant hairball. Psychiatric evaluation- trichophagia. Conventional laparotomy was indicated. The gastric hairball (20/15cm) was removed through a longitudinal gastrotomy. Surprisingly the exploration showed a giant jejunal hairball (15/7 cm), that we removed through an enterotomy. Postoperative follow-up without complication.

**Conclusion** - case particularities - In conclusion, trichobezoar should be considered in young females presenting with non-specific abdominal complaints. Trichotillomania and trichophagia are frequently associated with hairball. Endoscopy can be used as a diagnostic modality for these patients. Conventional laparotomy is still the treatment of choice.

## 29. ROLE OF METALLOPROTEINASIS IN FAILURE OF ARTERIOVENOUS FISTULAS IN PATIENTS WITH END STAGE RENAL DISEASE

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**Introduction:** Patients with chronic renal failure in uremic stage require one of two forms of kidney function replacement - hemodialysis or peritoneal dialysis. The most common way of

access for hemodialysis remains native arteriovenous fistula.

**Material and method:** 53 years old patient with chronic glomerulonephritis in uremic stage on hemodialysis by radiocephalic vein arteriovenous fistula for about 7 years. Arterialized aneurysmal antebrachial cephalic vein with post-dialysis hemostasis disorders.

**Results:** Excision of the aneurysmal vein and anatomopathological examination reveals major reshuffle with severe pathological consequences on the parietal media. The parietal aneurysmal modifications are the result of the exacerbation of the destructive extension of the metalloproteinases on the parietal vascular media, similar to those occurring in the aneurysmal arterial wall.

**Conclusion:** Physio-pathological mechanism and pathological veins reshuffles occurring in arterIALIZED aneurysmal veins similar to arterial aneurysms require aneurysmal excision due to the risk of major bleeding.

### **30. APPENDICULAR PERITONITIS**

**Authors:** S. Pătrașcu, D. Cârțu, S. Râmboiu, D. Mărgăritescu, F. Cioară, S. Toma, V. Băleanu, M. Lazăr, L. Barbu, Duică Larisa, D. Belivacă, M. Bică, E. Georgescu

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**Background:** Although the laparoscopic approach had become a routine for uncomplicated cases of acute appendicitis, there is still a lack of consensus concerning the value of laparoscopy in appendicular peritonitis, due to high morbidity.

**Method:** We performed a retrospective analysis of the patients admitted in our Department for appendicular peritonitis between 1<sup>st</sup> of January 2007 and 30<sup>th</sup> of June 2015. The main outcome measures were the intraoperative incidents and postoperative morbidity of the laparoscopic approach in appendicular peritonitis.

A total number of 83 patients (30 female), with a mean age of 39,9 years (range 16-73 years) were analyzed. The time between clinical onset and hospital admission was less than 24 hours in 11 cases, 24-48 hours in 53 cases, and over 48 hours in 19 cases. The critical interval between admission and surgery was less than 24 hours for 75 patients and 24 hours in 8 patients. Clinical presentation consisted in localized guarding in 64 cases and generalized defense in 13 cases (absent in 6 cases). Blood tests: mean Ht – 39,7% (range 32-46%), mean leukocytosis:

14071/mmc. Surgical procedure used the conventional 3-trocars laparoscopic approach, bipolar/Ligasure dissections and extracorporeal knot ligation of the appendicular stump.

**Results:** 64 patients have been successfully performed by laparoscopy. Intraoperative incidents consisted of serosal lesion of cecum in one patient, serosal lesion of distal ileum – one patient, ovarian tumor of large dimensions needing mini-laparotomy for extraction – one case, perforation of the base of appendix – one case, and section of appendicular stump during extracorporeal knot fixation in 4 cases. Associated interventions included: enteroraphy hernia repair – 1 case; cecoraphy – 4 cases; evacuation of the ovarian cyst – 1 case; umbilical hernia repair – 1 case; and ovariectomy – 1 case. Postoperative complications: surgical site infections – 5 cases; sub-phrenic abscess – 1 case, postoperative ileus – 2 cases and right lower quadrant abscess – 1 case. The mean hospital stay was 5,32 days (range 2-9 days).

**Conclusions:** Laparoscopic management for appendicular peritonitis is a safe and feasible procedure, with a low rate of surgical complications, an acceptable conversion rate and rapid recovery.

### **31. CLINICAL AND PARACLINICAL PROGNOSTIC FACTORS IN COLON CANCER**

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**Introduction:** Colon cancer (CC) is an important cause of morbidity and mortality with about 300.000 new cases and 200.000 new deaths annually due to this condition in Europe and the United States. Are mentioned about colon cancer primarily increasing incidence and prevalence of its important and obvious, recorded around the globe and affect both sexes equally, a situation that enables non-differentiated approach to screening and diagnostic processes. The research aims it's to investigate the clinical and paraclinical highlighting of this neoplasia.

**Material and method:** This is a retrospective study over a period of 3 years (2012-2014) that follows the patients hospitalized in 3<sup>rd</sup> General Surgery Clinic of

ECCH of Craiova with a diagnosis of colon cancer. There were 143 cases, of which 82 (57,3%) benefiting from the emergency surgery for complications of neoplastic disease.

**Results and discussions:** The number of CC cases was increased from 37 (2012) to 45 (2014), a statistically significant increase of 21,6%. The age of patients with a surgical emergency that was between 37 to 86 years with a mean of 64,1 +/- 2,8 years. Gender distribution has a ration B/F=1,26, and 68 patients were from urban areas and 77 in rural areas. The clinical diagnosis was interpreted differently depending on the location of neoplasia. Thus, 143 patients had typical clinical symptoms of tumor position, meeting 41 locations on the right colon, 19 on transverse colon and 83 locations on the left, encountering synchronous cancer at 4 patients. The symptoms and clinical signs frequently encountered were abdominal pain, weight loss, bowel disorders, anemia and constipation. We found that a significant percentage of patients with CC presents anemia and leukocytosis and nonspecific inflammatory reaction. 88 patients had plasma protein values below 6g%. Immunoassays have not consistently performed in 41 cases they were positive for CEA and immunohistochemical marker Ki 76. Imagistic explorations have confirmed the diagnosis of colon cancer, supporting it and allowing local and remote assessment of progress to neoplasia. Endoscopic methods were 75,45% of investigations conducted, alongside the abdominal radiography, pulmonary and abdominal ultrasound imaging representing all major investigations.

**Conclusions:** Factors contributing to a favorable prognosis in CC are female gender, urban areas, aged below 50 years, the absence of associated diseases or complications of neoplasia, left colic locations, elective surgery, vegetant macroscopic forms and diagnosed disease in A or B Dukes stages.

### 32. COLLAGEN METABOLISM – KEY FACTOR IN INCISIONAL HERNIA FORMATION AND RELAPSE

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**Introduction:** Despite continuous advances in manufacture of synthetic mesh and of their increasing use, the relapse incisional hernia

occurs in 5 to 20% of cases, with a linear increase in incidence over the years, suggesting a multifactorial process rather than a simple problem of surgical techniques as substrate. The purpose of this systematic study is to assess the biochemical mechanisms involved in formation and relapse of incisional hernia, focusing on the role of type I – type III collagen ration.

**Material and Methods:** The study included 21 consecutive patients with incisional hernias (recurrent) hospitalized and operated in General Surgery Clinic of the Clinic Hospital ‘Carol Davila’ Bucharest between June 2014 and February 2015 and a control group of patients with other pathologies, but with incisional hernias operated in their history. Patients were followed prospectively.

**Results:** From all patients were taken biopsies from the postoperative scar in order to calculate collagen I/III ratio through immunohistochemistry method. Also, net fragments excised during surgery were fixed in paraffin, colored with HE and underwent the microscopic examination.

**Discussions:** Recent research in molecular biology have shown increasing evidence of the presence of connective tissue disorders with wound healing and scarring deficiency in patients with incisional hernias. Currently, deep understanding of the pathophysiological mechanisms and the role of collagen in incisional hernia is still limited. It is also discussed the application of these in surgical practice.

### 33. LAPAROSCOPIC COLOSTOMY

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**Abstract:** This paper aims to assess the results of a series of 50 laparoscopic colostomies effectuated in our department between 2010-2015. In almost all cases it was about patients with rectal cancers (one exception); surgery was definitive in some cases (carcinomatosis, multiple liver metastasis) sometimes was performed in order to allow radio-chemotherapy followed by curative resection. Preoperative care was the usual. General anesthesia was used except for a case of active pulmonary TB in which spinal anesthesia was used. Three trocars were used having the camera placed in the right iliac fossa. It was performed sigmoidostomy

'wand'. We encountered a case when the sigmoid was mistakenly identified (obese patient with dolico-transvers). Postoperative evolution was favorable in all cases. The precarious state of the patients did not allow for a rapid discharge.

#### **34. DIGESTIVE TRACT MALIGNANT MELANOMA – REALITY OR FICTION?**

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Cutaneous malignant melanoma (CMM) is the most severe skin neoplasia. The survival rate is 9-12 months. CMM can practically affect any organ or tissue and is incurable. Although digestive metastases are frequent, they become symptomatic only for 2-4% of cases, the preoperative clinic diagnosis being settled for only 1,7% of cases.

Melanoma with gastro-intestinal localization is a problem under study because of its rare incidence and due to the necessity of explaining the onset and development of tissues without melanocytes. There are authors and studies in medical literature that support the concept of primary melanoma, gastric melanoma or intestinal melanoma. Starting from the case of a patient operated in the Clinic and reporting ourselves to the existing data, we tried to interpret some of the characteristic elements of this rare but terrible entity. A patient, 68, presents for some months indefinite abdominal increasingly ache, physical asthenia, a weight loss of 12 kilos and moderate anemia. By auto palpation, on the left flank, in the thickness of the wall, he discovers a tumor with a diameter of about 2,5 cm: painless, regular, non-modified superadjacent teguments.

The thorough examination (postsurgical!) discovers neither a suspect cutaneous lesion nor a scar. CT for thorax and abdomen: multiple secondary determinations without the possibility to specify a starting point – EDS and EDI without changes. The parietal tumor in the right flank was removed: the macroscopic aspect – mainly the color – suggests a metastasis of a malignant melanoma, with confirmation at the HP examination.

Laparotomy: in the mesentery, adenopathy of 1-3 cm, black ganglions and multiple tumors along the small intestine that narrow but do not annul the lumen. The patient is sent to

oncology. The prognosis of this type of tumor is reserved, with a post-operative average life span of 9-12 months and a very short rate of survival of 5 years.

#### **35. EMERGENCY SURGICAL TREATMENT OF COLORECTAL CANCER. RETROSPECTIVE STUDY 2012-2014**

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**Introduction:** News research in the field of colorectal cancer (CCR) is required by the continuous increase in the incidence of disease in developed countries, which already has showed high prevalence levels and in countries in which this disease did not realize before alarming rate. The aim of the research was highlighting the treatment of this cancer in the digestive emergency conditions.

**Materials and method:** In our study we followed retrospectively for a period of 3 years (2012-2014), patients hospitalized in the 3<sup>rd</sup> General Surgery clinic of SCJU Craiova diagnosed with colorectal cancer.

**Results and discussions:** There were 221 cases, of which 120 (54,2%) benefiting from the emergency surgery for complications of neoplastic disease. We note a high incidence of the complication of the disease onset. Patient age at which a surgical emergency was between 45 and 82 years with an average of 62,3 +/- 3,2 years. Gender distribution was 47 women (31,1%) and 73 men (60,8%), with a ratio F/B = 0,64/1, and 81 patients (67,4%) came from urban areas and 39 (32,5%) from rural areas. Notes the high incidence of cardio-vascular diseases and metabolic disorders. The most common was the onset of clinical signs and symptoms of intestinal obstruction, the clinical picture that degrades the patient by metabolic, fluid and electrolyte disorders of they generate and burdening the often unfavorable postoperative evolution (65%). Report localization colon/rectum cancer is 2,66; Left complicated colon cancer (60 cases) is more frequent than the right colon (20 cases) or transverse (7 cases). We note the large number of cases in advanced stages of neoplastic disease, 102 patients (84,9%) were diagnosed in stages Dukes C and D. interventions were excision of

tumor per primam represented 25% of operations (OP Hartmann and colectomy). Postoperative complications affected a large number of patients recorded 18 deaths (15%) including 7 deaths (5,8%) in the first 24 hours and 11 deaths (9,1%) occurred within a range 1-15 days after surgery.

**Conclusions:** Surgical treatment in emergency of colorectal cancer should address the complication (occlusion, peritonitis, bleeding) without forgetting and practicing resection of tumor when it is possible, being burdened by a higher rate of postoperative complications and death.

### 36. ENDOSCOPIC EVALUATION OF VENOUS VALVES LESIONS – A NEW TOOL FOR UNDERSTANDING VENOUS CHRONIC DISEASE

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Throughout life the venous system of lower limbs is subjected to inflammatory and degenerative injuries resulting in disabling scars. The significant impact of these injuries on patient's quality of life explains the interest for understanding the intimate mechanisms of chronic venous disease, for early diagnosis and for multimodal therapy. In recent decades, new physio-pathological concepts were launched and promoted, investigation capabilities had an impressive evolution and new therapeutic procedures were developed.

In the field of exploration, endoscopy and ultrasonography occupy distinct special places. Venous endoscopy is an invasive procedure, now with interest in research, but with large and promising perspectives in minimally invasive endovenous surgery. Endoscopic information on endovenous morphology, valve morphology and dynamics, their pathological changes (inflammatory lesions, valvular polyps, valvular ruptures, etc.) are unique, and made possible the introduction of new concepts like valvular segment, commissural reflux slit, commissural reflux channel, endophlebitis, etc. Ultrasound, a noninvasive method, provides exceptional data on venous anatomy, the position and dynamics of valves, transvalvular hemodynamics, transvalvular reflux and turbulences. A comprehensive ultrasound study can show the

'gates of reflux' from the deep venous system, axiality or eccentricity of venous reflux, longitudinal length and the duration of the reflux. Currently, no phlebologic surgical intervention can be conceived without ultrasound examination. The quality of the therapeutic approach and the results over time, relapses, etc., can be objectified using ultrasound.

These methods intended for morphological and dynamic assessment of the venous system help us to adopt the most appropriate therapeutic decisions but are also indisputable means of developing knowledge in phlebology.

### 37. ESOPHAGEAL CANCER: SHORT-TERM SURGICAL RESULTS

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**Aim:** Study of the postoperative results after esophageal cancer resection.

**Material and method:** This study includes 46 cases of esophageal cancer (17 cases of medium and superior thoracic esophagus cancer and 29 cases of inferior esophagus cancer) operated between 2007 and 2013 on 2<sup>nd</sup> Surgical Clinic of Craiova.

**Results:** There were performed 18 partial esophagectomies, 14 Ivor Lewis esophagectomies and 14 total esogastrectomies. The approach was made in McKeown modality in 17 cases, transhiatal in 1 case and Ivor-Lewis modality in 28 cases. The reconstruction was made using stomach in 27 cases (13 cervical anastomoses and 14 intrathoracic anastomoses), colon in 3 cases (cervical anastomoses), ileum in 1 case (cervical anastomoses), jejunum in 14 cases (intrathoracic anastomosis); in one case, the intraoperative hemodynamic instability made the anastomosis unfeasible, so the intervention was ended with gastrostomy and cervical esophagostomy. There were 4 deaths (8,68% mortality): 11,11% mortality after partial esophagectomies, 7,14% after intrathoracic anastomotic disruption vs 5,88% for cervical anastomosis. Early postoperative morbidity was 39,13%. The anastomotic leakage occurred in 17,77% of the cases: 29,41% cervical anastomotic leakages with 20% mortality vs 10,71% intrathoracic anastomotic leakages with 33,33% mortality.

**Conclusions:** Esophageal cancer surgery remains tagged by frequently postoperative complications and a significant mortality, especially after partial esophagectomies. Anastomotic breakdowns, especially intrathoracic ones, are associated with important mortality.

### 38. FREE REVERSE RADIAL FOREARM FLAP FOR TONGUE AND MOUTH FLOOR RECONSTRUCTION

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Tongue and floor of the mouth represent some of the most common sites of neoplasm in head and neck region. Among all categories of neoplasms at this level, studies have shown squamous cell carcinoma as the most common form. Standard therapeutic strategy consists in surgical excision in oncological safety limits, neck dissection, followed by radiation and chemotherapy. In this paper we studied two clinical cases represented by two male patients. Lingual invasive neoplasm with right submandibular and laterocervical lymph nodes. As surgery was performed total glossectomy, neck dissection in cervical and submandibular regions. The defects created were covered using reversed radial free flap surgical transfer. In the evolution of longer-lasting smooth integration flaps were found at the site quite early resumption of donor with functionality area. Also from the point of view aesthetic results were satisfactory. Aggressive surgical treatment from oncological lymph nodes represents the first intention treatment followed by chemotherapy and radiotherapy. As a method of covering the defect created after surgical resection the reverse radial free flap is very versatile in relation to the oral region.

### 39. IMMUNOHISTOCHEMICAL STUDY OF SENTINEL LYMPH NODE IN COLON CANCER

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**Background:** Lymph node status is the most important predictive factor in the treatment of colon cancer. As a sentinel lymph node (SLN) biopsy might upstage stage II colon cancer, it could have therapeutic consequences in the future, foaming the basis of the multidisciplinary decision to receive or not the adjuvant chemotherapy.

**Aim:** To investigate and evaluate nodal micro-staging and ultra-staging using cytokeratin immunohistochemistry.

**Material and methods:** In 25 consecutive patients operated on Second Surgery Clinic of the County Hospital Craiova for colon cancer, the identification of sentinel lymph node was performed during surgery (in vivo procedure) or immediately after the removal of the resection specimen (ex vivo procedure) Patent Blue dye in searching for occult micro metastasis, each SLN was examined. In tumor-negative SLNs at routine hematoxylin-eosin (H&E) examination (pN0) we performed cytokeratin (CK) immunohistochemistry (IHC).

**Results:** The procedure was successful in 23 out of 25 patients (92%). The SLN was negative in 5 patients detected by H&E and IHC, in 13 patients the non-SLN was also negative. In 5 patients with SLN negative by HE was positive by IHC, leading to a 22% value of upstaging.

**Conclusions:** The SLN concept in colon carcinoma using Patent Blue V is feasible and accurate. It leads to upstaging of nodal status in 5 cases (22%) when IHC techniques are involved. The clinical value of the method will be evaluated by postoperative chemotherapy efficiency.

### 40. IS THE PROPHYLACTIC PERCUTANEOUS ENDOSCOPIC GASTROSTOMY (PEG) THE TECHNIQUE OF CHOICE FOR THE NUTRITIONAL SUPPORT IN PATIENTS WITH CERVICAL CANCER?

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**Objective:** We evaluated the effectiveness and safety of prophylactic PEG performed for the enteral nutrition support during the

oncological treatment of the patients with cervical cancers.

**Material and methods:** In the last one year we followed up on a group of 23 patients subjected to prophylactic PEG. We assessed the duration of the procedure, intraprocedural incidents and their causes, time to refeeding through the tube and discharge after intervention, post interventional analgesia, early and late complications, toleration, costs and postoperative course of these patients after radical surgery maintaining PEG in place.

**Results:** The procedures were performed under sedation with Midazolam and the mean duration was about 7 minutes. In two cases it was difficult to transilluminate the anterior wall of the stomach due to postoperative adhesions and obesity. As postoperative analgesia, Ketonal 100-300 mg intravenous was used for the first 24 h post intervention. Refeeding through the tube was started 2-4 hours later and the patients were discharged 12-24 h after the procedure. Early complications were not observed and later we noted 2 cases of peristomal infections, successfully managed conservatively. By comparing the results with the group of patients fed through the nasogastric tube, after oncologic surgery we noted 2 (8,69%) pharyngocutaneous fistulas in PEG group as opposed to 26% in the other. Conservative care obliterated the fistulas at 4 weeks, maintaining the feeding tube in place.

**Conclusions:** PEG is a simple minimally invasive procedure performed safely under sedation. It takes a very short time and is virtually free of major complications. The requirements of analgesics are minimal. The refeeding is started early and the tube is well tolerated by the patient. The patients are quickly discharged and the overall cost is low. PEG has an important role in conservative healing of pharyngocutaneous fistula and probably in decreasing the frequency of these fistulas.

#### 41. LAPAROSCOPIC SURGERY OF OBESITY – INITIAL EXPERIENCE

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**Aim:** To study the initial experience of our department in laparoscopic surgery of obesity.

**Material and method:** the study group consisted of 6 patients with obesity that underwent laparoscopic surgery in our department. Five gastric sleeve interventions and one gastric by-pass were performed. We analyzed the patients preoperative BMI and comorbidities, the duration of the operation and postoperative short and long outcome. The mean duration of surgery was 3 hours and 15 minutes. Postoperative short-term outcomes were favorable for all patients. There was one case of postoperative fistula without clinical expression. Long term follow-up showed a mean weight loss of 32 kg over the first four months. Also important decrease in comorbidities was observed.

**Conclusions:** Obesity is a major public health issue worldwide. Laparoscopic surgery for obesity can lead to significant weight loss for selected patients and consecutively can result in major decrease of obesity related comorbidities.

#### 42. LAPAROSCOPIC RESECTION OF A GASTRIC GIST

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We present the case of a 75 years old admitted in our surgical department for severe anemia, hematemesis and melena. Physical general examination apart an altered general status and typical syndrome of severe anemia was without any other particular findings. Laboratory data were within normal range. Upper digestive tract endoscopy discovered a submucosal gastric tumor 4/5 cm, with ulceration of the mucosa and adherent blood clot, on the posterior gastric wall. Abdominal ultrasound and pulmonary x-ray excluded distant metastasis. Surgical intervention was carried out after normalization of hemoglobin with blood transfusions, by laparoscopic approach. The tumor was excised from the posterior wall through an anterior longitudinal gastrotomy, with an endoscopic stapler, completing hemostasis of the suture line with pinpoint bipolar coagulation. The anterior gastrotomy was closed by an application of endoscopic stapler. Initial postoperative course was uneventful, however the patient developed an acute left parotiditis and as a consequence of

the systemic treatment with broad-spectrum antibiotics, she acquired a pseudomembranous colitis that finally resides after weeks of treatment. The histopathologic examination and immunohistochemical analysis revealed a gastrointestinal stromal tumor with low potential for malignancy. Actually, at 5 months follow up, the patient is well, disease free and undergoing therapy with Gleevec®.

### **43. MATRIX METALLOPROTEINASES -2 AND -9 IN BOWEL DISEASES – QUESTIONS TO BE ANSWERED**

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As we know, the matrix metalloproteinases (MMPs) are a group of zinc dependent proteases with the primary role of degrading insoluble components of the extracellular matrix (ECM), thus favoring tissue repair and remodeling in various processes that occur continuously, a part of everyday biological life as we know it. Since their discovery over fifty years ago, a lot of studies proved that elevated levels of specific MMPs correlate with cancer development, progression and metastasis but not only. Since then, a lot of therapeutic expectations were linked with the control of the MMPs activity or expression. However, the discovery and use of tissue inhibitors of metalloproteinases (TIMPs) as well of some synthetic MMP inhibitors (SIMP) was disappointing in terms of result.

Passing the 80's and the early 90's concept that MMPs are just enzymes that clear the way for cancer cell growth, and destroy the barriers so those cells can invade and metastasize, a lot of studies proved complex roles of MMPs in an organized chaos, called "proteases web". For now, it is obvious that we cannot control the event appeared in this dynamic complex process of tissue reshuffling by simply inhibiting one or the other component. In some cases, those kinds of actions, that seem perfectly logical in a simplified model, can induce opposite effects than those expected since MMPs are in the meantime a part of our defense system.

Regarding bowel diseases and MMPs, a lot of studies showed MMPs implications in cancer, especially -2, -3, -7, -9 and -10, and a few

studies including one of us, found high levels of MMP -1, -2, -3, -9 in chronic inflammatory bowel diseases (IBD) both in tissue samples and serum. If we rethink the link between IBD and cancer at a microenvironment level, we can suspect that unbalanced, inflammatory induced MMPs activity finally leads to cancer development, not far from Virchow's chronic irritation theory exposed more than 150 years before. It is also a well-documented fact that lymphocytes use MMPs extravasation and migration through tissues in the chronic inflammation sites. Immunohistochemical studies on MMPs activity shows higher levels at the edge of the invasion, at the border between colon adenocarcinomas and peritumoral inflammation, the picture of a battle in which immunity might be first suppressed by the general use of TIMPs or SIMPs.

Furthermore, high levels of circulating TIMP-1 seem to be associated with a poorer prognostic in colorectal cancers. In this light, the use of MMPs inhibitors might be helpful in controlling the damage in IBD or postpone invasion in early stage cancers, before invasion through the basal membrane occurs, but not in advanced stages of carcinomas. Another suggested approach might be the local use or local intratumoral activation of MMPs inhibitors, trying to reduce the local tumoral spread in conjunction with neoadjuvant therapies, offering the chance for a better surgery.

For now, it is obvious that we don't have the means and tools to fully understand the "proteases web" as a dynamic universe and the wise approach is to treat it like a "black box", to search for the inputs and their fine tuning in order to have better results. In the support of this kind of approach come a few studies that proved the protective role of some MMPs (including -8, -9, -12) in specific cancers. Following those principles, we think that it is wise and advisable to orientate the research from clinical needs and observations to fundamental science, otherwise risking remaining lost in our own micro universe.

### **44. MISCELANEOUS COMMUNICATIONS SKILLS IN SURGICAL TEAM**

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**Introduction:** The surgical team has the duty to ensure and promote a positive working environment that enhances the performance of a team and results in good outcomes for the patient's safety. The most important attributes which are critical to the development of a high-performance team are: membership and leadership. In order of importance of features, team members are likely to feel committed and involved in the team and experience mutual trust and respect. In a safe interpersonal environment surgical team members feel free to express their views, challenge one another and formulate concerns. They also feel comfortable to discuss slips and mistakes.

A simple way of reviewing and reflecting on performance is to ask:

- What did we do well?
- What could we have done better?
- What should we stop doing?
- What should we continue doing?

**Conclusion:** Communication skills are a key component of the surgery practice that can be taught, learned and upgraded, thus improving the performance and enjoyment in clinical practice. Inter-professional communication in the root cause of many medical errors. Structured communication protocols, such as SBAR, are designed for efficient and complete communication.

#### 45. NOTES-GASTROJEJUNOSTOMY VS ENDOSCOPIC ULTRASOUND (EUS)-GUIDED GASTROJEJUNOSTOMY IN MANAGING OBESITY – A FEASIBILITY STUDY ON PIGS

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**Background:** Over the past years, endoscopic therapies have been evaluated, as they are considered the next step in minimal invasive surgery, with multiple advantages as compared with conventional or laparoscopic interventions. With laparoscopic gastric by-pass in treating morbid obesity as the golden standard, alternative endoscopic procedures are currently tested, with the ultimate goal to develop a therapeutic method with less physical discomfort and faster recovery for patients.

**Objective:** To compare Natural Orifice Transluminal Endoscopic Surgery (NOTES) versus Endoscopic Ultrasound (EUS)-Guided Gastro-jejunal By-pass (EUS-GJJ) in experimental pig models.

**Materials and Methods:** Under general anesthesia, 4 pigs were subjected to a gastro-jejunal bypass (GJJ), being divided in two groups. NOTES intervention were performed with an endoscope which allowed gastric incision and peritoneal visualization. Consecutively, laparoscopic access was realized and a jejunal loop was placed near the gastric wall incision and sutured. EUS-guided procedure consisted of an entering balloon inflated away from the duodenum and visualized under EUS-imaging. The next step was to deploy a lumen apposing hot metal stent (Xlumena, Mountain View, USA) nearby the balloon on EUS-guidance. All pigs were clinically followed for the next two weeks concerning food intake, weight and behavior, and necropsy was subsequently performed.

**Results:** Technical success was observed in both experiments. The mean time for EUS-GJJ was shorter than NOTES-GJJ with almost 20 minutes. All animals showed normal eating behavior without any sign of infection within the follow up. No stent migration and no suturing complications were observed. Necropsy showed complete adhesion between the stomach and the jejunum wall in all cases.

**Limitations:** Small number of animals. The pylorus was not closed.

**Conclusion:** Both procedures prove to be technically safe, with no side effects on follow-

up. EUS-GJJ seems to be more accurate for choosing the specific length of the jejunum when using an enteric balloon, and much faster as compared to a NOTES technique.

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#### **46. RETROPERITONEAL LIPOSARCOMA – 1 YEAR FOLLOW UP**

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Primitive retroperitoneal liposarcoma are those tumors grown inside the retroperitoneal space on the fat tissue, the connective tissue, the fascia, the vascular tissue, the nervous tissue, the muscle tissue, the lymphatic vessels and the lympho-ganglions or from embryonal residues. The anatomic space known as retroperitoneal, a no-man's land or everyone's land – brings together the endocrinologist, the general and vascular surgeons, the urologists and neurosurgeons. The primitive tumors of this space bring forth particular aspects of diagnosis, histologic category, evolution but, above all, of the therapeutical conduct. We speak about a particular case of pleomorphic liposarcoma in a young woman, in evolution for 7 years; during this period, she underwent 5 surgical interventions, only for local recurrence, completely asymptomatic, objectified either by dimensions or by CT. This case of liposarcoma brings into discussion the "difficult to explain" permissivity of the retroperitoneal space for the growth of some tumoral mass of huge sizes and the quasi-total absence of symptomatology. From the histopathological point of view, the 8 known types, the pleomorphic liposarcoma is the rarest and the least known. They represent less than 15% of liposarcoma, they develop equally distributed retroperitoneal and inside deep profound soft tissues, they have a high degree with local recurrence, a rate of metastasis of 30-40% and a survival rate up to 5 years of 55-65%. The first intervention lifted the lipomatosis tumor with the right kidney, a laborious intervention but without risk: periods", unlike the 4 re-interventions technically "delicate" due to the relations with

the duodenum and the cava. Every intervention is documented from the imagistic, histopathologic and immune-histochemical point of view. The patient is under observation, surgically and oncologically.

#### **47. STAPLERS IN EMERGENCY COLIC SURGERY – CONTROVERSIES AND CONFIRMATION**

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**Introduction:** With the introduction of staplers in the surgical practice, the operating time of the construction of the anastomosis has been reduced, with the tendency of its realization within the same intervention, decreasing the number of resections followed by colostomy, in emergency. Does this situation increase the mortality and/or morbidity rates?

**Material and method:** We analyzed a large group, of 573 patients, who underwent a surgical intervention in emergency, within an interval of 10 years (2005-2014), with the realization of a mechanical colo-colic anastomosis, per primam, avoiding the primary intention or the protective stoma.

**Results and discussions:** We compared this group with another group, numerically comparable, of patients for whom the anastomosis was made manually, also in emergency with similar pathology and period of study, of 10 years, between 1995 and 2004. Regarding the anastomosis, the incidence of fistulas was analyzed. The results highlighted the superiority of the mechanical method compared with the manual construction.

**Conclusions:** The use of staplers proved to be safe and encouraging for the surgeon, shortening the operative time and favoring the per primam construction of the anastomosis, without endangering the patient.

#### **48. STAPPLERS MANAGEMENT FOR COLIC COMPLICATED TUMORS**

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**Introduction:** Staplers in surgical practice reduce the operating in emergency conditions for complicated colic tumors. Whenever an anastomosis is suitable, we obtain better results with staplers.

**Material and method:** We analyzed a group of 127 patients with colic tumors, who underwent a surgical intervention in emergency, within an interval of 5 years (2010-2014), with the realization of a mechanical colo-colic anastomosis, per primam, avoiding the primary intention or the protective stoma.

**Results and discussions:** We analyzed and compared the results of different types of colo-colic anastomosis (end-to-end vs. latero-lateral), decided by the types of staplers used, regarding the incidence of fistulas.

**Conclusions:** We found no difference between the two types of colo-colic anastomosis, each of them being decided by the surgeon, judging on colon caliber, disposable staplers and personal habits.

#### 49. SURGICAL APPROACH OF COLO-RECTAL CANCER BETWEEN RADICALITY AND FUNCTIONALITY

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**Introduction:** In the last years there has been a repeatedly insisting for the TME, as key to reducing pelvic recurrence. There are issues still 'debatable' that invite for reflection, taking as its starting point the precepts of RJ HEALD.

**Material and Method:** There were under discussion including some aspects, still subject to controversy, the extirpation scale, critical points of surgery risk, attitude on protection genitourinary innervation. For this purpose, the present surgical considerations towards: rectal anatomy and mesorectum; TME and its limits on dissemination aspects of pathology and tumor grading, pelvic recurrence and adjuvant therapy. Was analyzed the rate of complications, and the patients QOL as subject of TME. Our study did show a nonsignificant higher positive circumferential resection margin rate in patients undergoing laparoscopic anterior resection compared to other resection.

**Discussion:** There are a total of six critical points in rectal surgery that can improve the success rate in colorectal surgery. Laparoscopic

TME is feasible in almost all patients with lower rectal cancer regardless of whether they have undergone chemoradiation therapy. It is mandatory to excise lymph station 1 and then, minimum one non-invaded station. In vertical plane the principle is applied, usually 1, 2 and 3 stations are excised. In lateral plane TME excise only one lymph node station. WHY?

#### 50. TOTAL STERNUM RESECTION AND RECONSTRUCTION OF STERNUM WITH ACRYLIC CEMENT FOR UNIQUE MASSIVE STERNAL METASTASIS AFTER OPERATED BREAST CANCER – CASE REPORT

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Unique sternal metastasis is an uncommon finding in the follow-up of operated breast cancer. We present a case of massive sternal metastasis occurred few years after radical resection of a left mammary cancer, that we solved by total sternal resection and reconstruction of sternum with acrylic cement and vicryl mesh. The patient is disease-free 3 years after operation.

#### 51. TRAUMA: DEVELOPMENT TENDENCIES IN BORDER ULTRASONOGRAPHY OF THE THORACOABDOMINAL TRAUMA

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**Introduction:** Thoracic and intercostal space ultrasonography, for a long time considered without applicability, has, within the last 10-15 years, gained importance, bringing useful and

sensible information, especially in emergency. Starting with FAST, passing through E-FAST, the ultrasonography examination of the thorax developed, with high sensibility and specificity rates in the diagnosing posttraumatic pneumothorax.

**Material and method:** A prospective study was conducted during the last year, in emergency, that included 123 patients, comparing the efficacy of the thoracic ultrasonography versus conventional radiology in diagnosing and monitoring the posttraumatic pneumothorax.

**Results and discussions:** Computed tomography remains the standard examination, with the lowest failure rate in diagnosing the posttraumatic pneumothorax, in spite the disadvantages: high cost, irradiation and a long duration. Intercostal space ultrasonography, compared with the conventional radiology, proved to have similar results, within the group investigated, both for the diagnosis of the posttraumatic pneumothorax and for postoperative monitoring of the patients with pleural drainage.

**Conclusions:** The ultrasonography of the thorax should be (re)considered in the exploration of the patients with politrauma, in emergency, being a simple, non-invasive, rapid and extremely useful method at the patient's bed.

## **52. RETROSTERNAL GOITER - EXPERIENCE OF 2ND SURGERY CLINIC, TIMIȘOARA**

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**Introduction:** Thyroidectomy is the treatment of choice for retrosternal goiter (RSG), whether expansion of intrathoracic goiter is total or partial. Studies in the literature concludes that most RSG could be excised by one approaches the neck, without requiring sternotomy or thoracotomy. We present a retrospective study of 28 cases of RSG.

**Methods:** This is a retrospective study between 2012 and 2015 of the patients with RSG operated in Surgical Clinic No2 of County Emergency Hospital Timisoara. All the patients had total or subtotal thyroidectomy, in 9 cases the operatory team was composed of general surgeons and thoracic surgeons.

**Results:** There were 28 patients, including 20 females. Twenty patients were older than 60 years. Only 3 goiters were malignant: two medullar carcinomas and one non-Hodgkin lymphoma with B cell. Two cases needed preoperative treatment in order to achieve normal thyroid hormones values. In this study 90 % of the goiters were removed only with the use of cervical approach; in one case sternotomy was used, in another thoracotomy, and a combined approach in another case. In all three cases which required more than a cervical access large RSG grade III were found. There were complications in five cases: hemorrhage in 2 cases (one requiring re-operation) and recurrent laryngeal nerve palsy in 3 cases.

**Conclusion:** RSG can be managed by cervical approach in vast majority, only large RSG grade 3 with thoracic origin of the thyroid vascularization require systematic sternotomy or thoracotomy. Complications are more frequent due to the size of the goiter, the long period of evolution and the modified local anatomical landmarks and reports.

## **53. ROBOTIC APPROACH IN RECTAL CANCER VERSUS LAPAROSCOPIC APPROACH:**

### **PRELIMINARY RESULTS OF A PROSPECTIVE COMPARATIVE STUDY**

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**Abstract:** The conventional laparoscopic approach to rectal surgery has several limitations, and therefore many colorectal surgeons have great expectations for the robotic surgical system as an alternative modality in overcoming challenges of laparoscopic surgery and thus enhancing oncologic and functional outcomes. The aim of this study was to evaluate the feasibility and short-term outcomes of robotic surgery for colorectal cancer as initial cases, compared with conventional laparoscopic surgery.

From July 2015 to October 2015, fifteen patients with left-sided colon and rectal cancer underwent robotic surgery, and we compare with 20 patients received conventional laparoscopic surgery selected from our database of 153 patients with colorectal cancer operated in the last five years. Both groups were balanced in terms of age, gender, American Society of Anesthesiologists (ASA) score, body mass

index (BMI), operative history, TNM staging, and tumor location using the propensity score matching method. The perioperative results included the operative time, amount of estimated blood loss, the need for open conversion or further surgery, complications, flatus passage, the length of postoperative hospital stay, and the number of retrieved lymph nodes.

There were no significant differences in the short-term outcomes between the robotic surgery group and the conventional laparoscopic surgery group. However, the operative time was significantly longer in the robotic surgery group than in the conventional laparoscopic surgery group.

There were no significant differences between the robotic surgery group and the conventional laparoscopic surgery group with respect to short-term outcomes, with the exception of the operative time. Our early experience indicates that robotic surgery is a promising tool, particularly in patients with rectal cancer.

#### **54. THE STUDY OF MATRIX METALLOPROTEINASE-9 (MMP-9) EXPRESSION AND ANGIOGENESIS IN COLORECTAL CANCER**

**Authors:** E. Georgescu, Milena Georgescu, V. Șurlin, Ș. Pătrașcu, I. Georgescu

Colorectal cancer development and metastasis is favored by the creation of mutual interconnections between tumor cells and the stroma. As the matrix metalloproteinases (MMPs) have an essential role in the remodeling of the tumor stroma, our aim was to assess the expression of MMP-9 on a number of 31 stage III colorectal adenocarcinomas. MMP-9 was highly yet inconstantly expressed in tumor cells, with the highest levels found in poorly and moderately differentiated carcinomas. A lower expression was discovered in well-differentiated colorectal cancers. Sometimes MMP-9 was expressed in stromal cells and in peritumoral macrophages. Metastasis-free lymph nodes had an intense positive reaction in both macrophages and lymphocytes. The intensely positive reaction was observed for the macrophages and lymphocytes in the tumor necrosis regions. The process of

angiogenesis was generally correlated with the intensity of MMP-9 reaction.

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