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ORAL PRESENTATIONS

LAPAROSCOPIC MANAGEMENT OF TRAUMATIC PANCREATIC LESIONS

Gratiana O. Alqadi, Carmen Chivu, Laura Balanescu

Emergency Hospital for Children "Grigore Alexandrescu" Bucharest

Aim. Minimally-invasive procedures for pancreatic trauma are only performed in experienced centres. The aim of this study is establishing the role of laparoscopy in the management of traumatic pancreatic lesions by evaluating the procedures and their results in the pediatric population. **Methods.** For this study, the literature was reviewed searching Pubmed with the terms "laparoscopy", "trauma", "pancreas" and "children". Articles in languages other than english and those presenting non-traumatic pathology were excluded. **Results.** The literature revealed 17 cases of children aged 4-14 years (mean 10 years) who underwent laparoscopic surgeries for traumatic pancreatic lesions. The majority of them were male (70%). The indication for surgery was a grade III pancreatic lesion in all but one case which developed 2 pancreatic pseudocysts 3 weeks after the traumatic event. There were 13 distal pancreatectomies, 1 proximal pancreatectomy, 1 partial pancreatectomy (the section was at the level of the mesenteric vessels) and 1 cystojejunostomy. In 3 cases a splenectomy was required (2 due to traumatic lesions and 1 because of dissection of the splenic vessels was impossible). Only 2 patients needed a drain. The mean operating time was 225 minutes, 6 patients needed total parenteral nutrition, the time to full feeds was 3.5 days on average and the mean hospital stay was 7.3 days. There were 7 complications including 2 pancreatic fistulas and 2 postoperative ileus. The follow-up ranged from 1 day to 1 month and there was no reported mortality. **Conclusions.** Minimally-invasive procedures are efficient in the management of traumatic pancreatic lesions, even if they are difficult to approach. The return to full-feeds is quick after laparoscopy. Complications arise in 41.17% of cases and there is no mortality.

IS KEYHOLE SURGERY THE KEY? THE USE OF LAPAROSCOPIC SURGERY IN PEDIATRIC UROLOGY – ONE TEAM EXPERIENCE

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Introduction and Purpose. Laparoscopic surgery had an increasing role over the latest years in modern pediatric urology. There are multiple reports that have shown the advantages of minimal invasive surgery over open surgery regarding different abnormalities of the renal system. We present our experience regarding the laparoscopic approach in the surgical treatment of some urologic problems in children. **Material and method.** We retrospectively reviewed the medical chart of all patients with upper renal tract surgical issues treated in our department by laparoscopic approach between January 2012 and June 2017. **Results.** Thirteen cases were included in the study, all children aged 5-17 years old. There were: 6 laparoscopic pyeloplasty (ureteropielic junction obstruction), 2 total nephrectomies (renal dysplasia), and upper pole heminephrectomy, renal cystectomy, pyelolithotomy for renal lithiasis, tumor nephrectomy and vascular hitch, one case each. The operative time was between 60 and 250 minutes. There was one conversion to open and one major complication (colic perforation that required

surgery and a longer hospitalization time). The follow-up interval was 4-48 months and all children had a favourable clinical and imaging outcome. Conclusions : Laparoscopic surgery has an important role in modern pediatric urological surgery with easy access to major structures, better visualisation than open surgery, quicker recovery and shorter hospitalisation time.

PRELIMINARY RESULTS OF TRANSUMBILICAL LAPAROSCOPIC ASSISTED APPENDECTOMY (TULAA)

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Introduction. Developement of minimal invasive surgery concept in the last two decades, determined many surgical teams to experience many techniques that are able to simplify the act of surgery. This simplification process is related to: shortening of the operation time, insertion of a reduced number of trocars and instruments, all of these reflected in low costs and short hospital stay. **Material & methods.** The authors are presenting a serie of 27 cases of TULAA. From all cases 21 were successful intervention and 6 of them were only TULAA attempts. The age of patiens was between 2,5 to 16 years. In our serie 18 cases were girls. **Results.** Over 77% of appendectomies were successful and 66% af cases were girls. Mean duration of surgery was 12,5 min and mean hospital stay was 1,5 days. No serious complications were recorded. In 6 cases the appendectomy was converted to the technique with three trocars. In 7 cases hematoma if the right iliac fosa was noted. **Conclusions.** TULAA is representing an excellent alternative to any appendectomy technique. Is a short intervention, painless and with ideal estetic results. Mean hospital stay is reduced but is necessary to select the cases based on some clinical issues.

THE MANAGEMENT OF ACUTE APPENDICITIS IN CHILDREN: A SURVEY OF ROMANIAN PEDIATRIC SURGEONS

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2. “Carol Davila” University of Medicine and Pharmacy Bucharest, Romania

Introduction: Even though appendicitis is the most common cause of acute surgical abdomen in children, there still is considerable variability in its diagnosis, management and follow-up. Until now, no nationwide survey on the issue has been performed in Romania. The aim of this study is to determine current surgical practice patterns among Romanian pediatric surgeons in the management of acute appendicitis in children. **Material and Methods:** We performed a nationwide survey in the form of an internet questionnaire asking for specific details regarding preoperative management, use of antibiotics, time of surgery, preffered surgical approach and follow-up of children presenting with acute appendicitis. **Results:** Fifty two pediatric surgeons from 17 different centers responded to the survey. The majority of respondents perform complete blood count (94.2 %), CRP (65.4 %) and abdominal ultrasonography (76.9 %) in the work-up of patients with suspected acute appendicitis. CT scan is rarely performed (3.8 %) whereas MRI scan is not performed at all. Preoperative use of antibiotics is initiated in 69.2 % of cases when uncomplicated appendicitis is suspected and in 92.3 % of cases with perforated

appendicitis. However, when uncomplicated appendicitis is suspected, antibiotic therapy alone (no appendectomy) is preferred only by 23.1 % of the surgeons, whereas appendectomy is the management of choice (98.1 %) in perforated appendicitis. Laparoscopic appendectomy is more frequently used in uncomplicated appendicitis cases (61.5 %) compared to only 36.5 % of perforated appendicitis cases. Regarding postoperative management, in both simple and perforated appendicitis, the majority of surgeons perform routine follow-up. Conclusions: Albeit there seems to be an apparent consensus among pediatric surgeons in our country, significant inconsistency still exists in the management of acute appendicitis. National guidelines and protocols are needed to standardise the care for children and to improve the training of pediatric surgery residents.

AN INITIAL EXPERIENCE USING LAPAROSCOPIC FUNDOPLICATION IN CHILDREN

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Introduction: Laparoscopic fundoplication has become a popular surgical technique in the treatment of gastroesophageal reflux disease in children. The aim of this work is to report our initial experience with laparoscopic fundoplication in the pediatric population. **Materials and Methods:** A retrospective review was performed between January 2013 and June 2017 and a total of 18 patients who underwent laparoscopic fundoplication were included in our study. Age ranged between 1 month to 17 years. The mean period of follow-up was 1 year. All patients had documented gastroesophageal reflux disease. **Results:** All surgeries were completed laparoscopically, no conversion to open surgery being necessary. There were no cases of intraoperative complications. In 17 cases a “floppy” Nissen procedure was performed, while in one case a Thal fundoplication was preferred. A laparoscopic gastrostomy was also performed in the neurologically impaired patients (4 cases). Regular feedings began on postoperative day 2 (mean). Mean date of discharge was postoperative day 5.5. Four patients developed postoperative dysphagia and responded to medical treatment. Recurrence of symptoms occurred in one patient who was also diagnosed with hiatal hernia and who underwent a redo laparoscopic “floppy” Nissen procedure due to breakdown of the first fundoplication. **Conclusion:** In our experience, laparoscopic fundoplication was a safe and effective treatment for children with gastroesophageal reflux disease.

THE ROLE OF MINIMALLY INVASIVE SURGERY IN THE TREATMENT OF OVARIAN PATHOLOGY IN CHILDREN

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Purpose. Adnexal pathology in girls near puberty causes increasingly frequent forms of chronic or acute abdominal pain especially in patients with menstrual disorders, growth disorders and correlated with the appearance of secondary sexual characteristics, if this pathology is common in puberty, there are also a few cases diagnosed at early ages. **Material & Methods.** The authors are communicating a number of 98 cases of gynecologic pathology admitted over a period of 10 years in our department,

some of them showing symptoms of acute abdomen others with chronic symptoms. Clinical examination correlated with imaging explorations were the most important in diagnosis. Also the therapeutical attitude varied along the years, after the introduction of the miniml invasive surgery in our departmentResults & Conclusions. The results were good, the follow-up of the patients including their integration into a family and their reproductive potential.

MODIFIED NUSS PROCEDURE

E.S. Boia^{1,2}, V.L. David^{1,2}, E.R. Iacob^{1,2}, M.C. Popoiu^{1,2}, P. Fuicu^{1,2}, S. Lazea^{1,2}, M.C. Stanciulescu^{1,2}, B. Ciornei²

1. „Victor Babes” University of Medicine and Pharmacy Timisoara
2. „Louis Turcanu” Emergency Childrens Hospital Timisoara

Minimal invasive repair of Pectus Excavatum (MIRPE) has now become the main therapeutic method for Pectus Excavatum (PE) in children. This study focuses on our experience with MIRPE with special emphasis on our improvements to the surgical procedure. Since 2007, we have performed 19 minimal invasive repairs of PE. The surgical technique was the standard MIRPE technique with the modifications we have previously described. We had no intraoperative accidents and no fatalities. Postoperative complications occurred in 7 of the 19 cases. Most of the complications (3 cases) were wound-related, with dehiscence or infection. Postoperative pleural effusions occurred in 2 patients, pericarditis in 1 case and bar torsion in 1 case. Reoperations were necessary in 3 cases, two of them for closing the dehiscent surgical wound and one for the torsion of the bar. The bar was removed in 12 patients after a period ranging from 2 to 5 years. Our results are comparable with those of the early reports of this technique and are subject to continuous improvement.

SURGICAL MANAGEMENT OF HIRSCHSPRUNG’S DISEASE – OUR EXPERIENCE

I.D. Gări, G.C. Drăgan, A.A. Moga, F.B. Djendov, L. Bălănescu, R.N. Bălănescu

Pediatric Surgery Department, „Grigore Alexandrescu” Clinical Emergency Hospital for Children

Introduction: Hirschsprung disease is a developmental disorder characterized by the absence of ganglia in the distal colon, resulting in a functional obstruction. We reviewed our experience in the surgical management in children with Hirschsprung disease. Materials and Methods: A retrospective evaluation was made of the records of 33 cases treated for Hirschsprungdisease between January 2013 and December 2016. Clinical presentation and surgical management options were evaluated. Results: Thirty three patients were analysed, with a mean age of 9,2 months, ranging from 1 month to 9 years. Abdominal disstension was present in majority of patients. In 83% of cases (20), barium enema was the imaging study of choice.Ten patients had had full thickness rectal biopsy and thirteen had full thickness colonic biopsy prior to surgery.Single stage primary pull through was applied in 75% of cases (25). There were three main surgical procedures for the treatment of Hirschsprung disease used; Duhamel’s pull through procedure was used in 36% (12) , Soave endorectalprocedure in 15% (5) and De La Torre transanal endorectal pull through in 48% (16). Seven patients who have had Duhamel pull through needed a second operation, with 2 pacients having two Duhamels pull through procedure, five pacients

needing anoplasty and one patient was operated for intussusception within one year after the initial procedure. One patient who was treated using De La Torre pull through needed a temporary diverting enterostomy and two patients were subjected to a Soave procedure. The mean hospital stay for the Duhamel group was 15 days, for the De La Torre group 14 days and for the Soave group 8 days. Conclusions: A one-stage pull-through for HD can be performed successfully using a transanal approach. This procedure is associated with excellent clinical results and permits early postoperative feeding, early hospital discharge, and no visible scars.

POUCH COLON - AN UNUSUAL FORM OF ANORECTAL MALFORMATION. CASE PRESENTATION

Stratone D, Dreptu I, Savu D, Tica C, Enache FD

Congenital pouch colon is an extremely rare variant of anorectal malformation (ARM) in which the distal part of colon is replaced by a pouch like dilatation usually terminating in a fistula communicating with the genitourinary tract. We report a case of a male child presented with congenital pouch colon, associated with 21 trisomy and cardiac malformation, managed with two-staged procedures.

POSTTRAUMATIC DUODENAL RUPTURE, PANCREATIC HEAD RUPTURE, SECONDARY PERITONITIS AND ACUTE REACTIVE PANCREATITIS IN A 9 YEARS OLD GIRL AFTER FALLING INTO THE BICYCLE HANDLEBAR- CASE REPORT

S. Lazea, E. Mussutto, E.R. Iacob, O. Belei, B Popescu, R. Badeti

Duodenal and pancreatic lesions following major abdominal trauma are extremely rare among the pediatric population resulting in morbidity and mortality rate over 60%. Timing in diagnosis, as well as prompt surgical management, are crucial in achieving maximum surgical benefit. We report a case of post-traumatic duodenal rupture (D4) with pancreatic rupture-dilaceration of body and tail, secondary peritonitis and acute post-traumatic pancreatitis in a 9-years-old due to abdominal trauma by falling on the bicycle handlebars. In emergency, after a careful biological rebalancing, an exploratory laparotomy was performed in the first 20 minutes; duodenal and pancreatic lesions were identified and duodenorrhaphy and subtotal pancreatic ablation of body and tail was performed with suture of the lesions of the remaining pancreas; drainage tubes in the pancreatic lodge and Douglas' pouch were inserted. For all the biological re-balances performed in the ICU service and postoperative care, a secondary duodenal fistula with extensive duodenal necrosis (D4) occurred in the immediate evolution. An iterative laparotomy on the 7th post-operative day was required, through which segmental enterectomy of the necrotized duodenum (D4) was performed with termino-terminal duodeno-jejunal enteroanastomosis by trans-anastomotic probe, approximately 2 cm below the Santorini channel, thereby preserving bile and pancreatic ducts. We focus on surgical management and postoperative care in such cases.

MINIMAL INVASIVE APPROACH IN EMERGENCY – YES VS. NO

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In the late 1980's minimally invasive approach was used for elective surgery. Now we use laparoscopic approach in emergency. There are two distinct clinical situations: 1. Specific pathology and specific planned procedure. 2. Uncertain pathology – diagnostic is the primary aim of laparoscopy. In this paper we will present two short movies where we approach two common types of pathology – acute appendicitis and Meckel diverticulum.

MECKEL'S DIVERTICULUM AND ITS PRESENTATIONS: A CASE SERIES

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Introduction: The clinical presentation of Meckel's diverticulum is usually caused by a complication such as rectal bleeding, intestinal obstruction, intussusception, acute inflammation or perforation. **Pre-operative diagnosis** of Meckel's diverticulum is rare in uncomplicated cases, and the diverticulum is usually observed incidentally, during other procedures for various reasons. **Material and method:** Case report: we are reporting three cases of Meckel's diverticulum with varied presentations in 6 months. **Results:** Post-operative period was uneventful in all cases. **Conclusions:** It is difficult to make a pre-operative clinical diagnosis and most of the times it is an intra-operative diagnosis.

LAPAROSCOPIC-ASSISTED EXCISION OF A SACROCOCCYGEAL TERATOMA IN CHILDREN – A CASE REPORT

I. Sârbu 1, 2, Ioana Petcu², Oana Trifan³, Stefana Carp², Doina Mihăilă⁴, Carmen Iulia Ciongradi^{1, 2}

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4. Department of Pathology, Emergency Children's Hospital "Sf. Maria", Iași

Introduction. Sacrococcygeal teratoma is the most frequent fetal and neonatal tumor, with an incidence of 1:35000-40000 live births. The Altman type III tumor has a preponderant pelvic development with a smaller external, coccygeal component. The surgical treatment of this type of teratoma implies a double access, both abdominal and perineal. We present our experience with laparoscopic assisted excision of a case of type III sacrococcygeal teratoma. **Material and methods.** We present the case of a male child, 1 year old, admitted to our department for constipation with 3 month onset, associated with palpation of a tumoral mass in right iliac fossa and hypogastric area. A sacrococcygeal teratoma was suspected based on imaging (ultrasound, MRI) and biological markers. A combined perineal and laparoscopic access allowed for total tumor and coccygeal excision, with favorable outcome. **Results.** The histopathological exam diagnosed a mixed germinal tumor T2bN0M0.

Chemotherapy was associated (6 cycles with Bleomycine, Etoposide and Cisplatin). The outcome was favorable at 6 month follow-up, with no relapse. Conclusions. The particularity of this case is related to the late diagnosis (due to predominant intrapelvic tumor extension) and to the mixed surgical procedure (laparoscopic access allowed for better dissection and visualization and quick recovery). We consider that laparoscopy is an excellent surgical tool in dealing with such pelvic tumors.

ESOPHAGEAL ATRESIA

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Esophageal atresia (absence or abnormal narrowing of an opening or passage in the body), is a birth defect of the esophagus that occurs early in pregnancy as the baby develops. Often times, this condition is not diagnosed during pregnancy. The esophagus and trachea form as one structure in the first few months of fetal life as a long, hollow, continuous tube joining the mouth to the stomach. In newborns with this birth defect the esophagus develops in two separate segments that do not connect. In most cases, two separate tubes are formed, an upper tube that ends blindly in a pouch in the upper chest, and a lower tube that is connected to the trachea (airway) on the upper end and to the stomach below. These separate tubes are sealed off creating a pouch on each side; the gap between these pouches can be either short or very long. Saliva will accumulate in the upper pouch as it cannot drain into the stomach. Esophageal atresia is frequently (in approximately one half of infants with esophageal atresia) associated with other congenital anomalies, of which the most common are cardiac (11-49%), genitourinary (24%), gastro-intestinal (24%) and musculo-skeletal (13-22%) malformations. Associated congenital anomalies can be found either individually, as part of malformative syndromes such as **VACTERL** association (**V**ertebral column, **A**norectal, **C**ardiac, **T**racheal, **E**sophageal, **R**enal and **L**imbs, **CHARGE** association (**C**olloboma, **H**ear defects, **A**tresia choanae, growth **R**etardation, **G**enital abnormalities, and **E**ar abnormalities), Fanconi anemia, or associated with chromosomal defects (Down syndrome, DiGeorge sequence, Pierre-Robin sequence. The presence of associated anomalies must be diagnosed preoperatively by postnatal imaging, such as an echocardiogram, spine ultrasound, and abdominal ultrasound, as they alter the overall prognosis and potential postoperative outcome. **CASE REPORT:** We report the case of a 1-day old female newborn who was diagnosed at birth with type IIIB esophageal atresia. The child developed hemodynamic instability secondary to consumption coagulopathy and respiratory failure. The image studies showed a 3.5 cm gap between the two esophageal pouches, and aeration of the gastro-intestinal tract. A right postero-lateral thoracotomy with distal trachea-esophageal fistula closure and a primary T-T esophageal anastomosis were performed by transpleural approach. A right thoracic drain was left in place for 7 days. The child was extubated 3 days post-operatively with no early signs of complications; the patient was discharged from hospital 12 days post-operatively, and is presently asymptomatic. **DISCUSSION:** Survival rates in patients with EA and TEF have increased dramatically in the past decades, yet there are still cases in which the general prognosis is severely altered by several criteria, the most important of which are low birth weight and major congenital cardiac anomalies/ or major associated anomalies. Despite excellent long-term survival rates in children with esophageal atresia, there are still a great number of complications (early or late) associated with surgical treatment of this specific anomaly. Predicting factors for post-operative complications are: twin birth, pre-operative intubation, birth weight of < 2500g, long-gap esophageal

atresia (high-tension anastomoses, ischemia of esophageal ends, use of esophageal lengthening techniques), post-operative intubation of > 4 days, inability to feed at 1 month of age.

CAN SBS RETROSPECTIVE STUDY HELP IMPROVE FUTURE PATIENT'S MANAGEMENT.

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Background: Patients with neonatal short bowel syndrome (SBS) have a complex management challenge, this means a significant health care system cost. This is a patient retrospective study-based estimate for children and neonate with SBS in our hospital. Population estimate of the incidence and mortality rate of neonates with SBS is not so accurate because of the differences in the definition, follow-up and regional referral patterns. The introduction of total parenteral nutrition (TPN) lead to a remarkable improvement in the survival SBS patients, but unfortunately the most common cause of death in patients with SBS is also TPN- induced hepatic dysfunction. However the survival of patients with less than or equal to 40 cm of residual small bowel is now routine. Moreover, the long term survival of infants with as little as 20 to 30 cm small bowel can be expected, while the survival of an infant with as little as 10 cm jejunioileum with ileocecal valve or with 25cm jejunioileum without ileocecal valve has been reported. The management goal of these patients is to reduce the duration of TPN and to maximize intestinal nutrient absorption. It is difficult to predict the duration and the type of nutritional support for patients with SBS. Some patients may require permanent parenteral nutrition (PN) on either a continuous or intermittent basis depending on the length of the residual bowel. The aim of this article is to evaluate the direct and the indirect evidence that adaptation occurs after an extensive bowel resection, to review the factors that influence adaptation and to assess the strategies used in attempts to optimize this process.

INTRALESIONAL INJECTION WITH BLEOMICINE FOR VASCULAR MALFORMATIONS. 7 YEARS EXPERIENCE

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The presentation analyzes intralesional injection with Bleomicyne as first intention over an 11-year period of 160 cases, analyzing patient medical history, clinical examination, imaging, pathology and prospective outcomes. We obtained: very good results, satisfactory results and unsatisfactory results. Conclusions: Good efficacy in angiomas, cystic hygromas, low flux vascular malformations; Moderate response in malformations with high or complex flux. Currently, there is a controversy over the treatment, which is why diagnostic and treatment errors often occur

PEG GASTROSTOMY FOR CHILDREN

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Introduction: Since 1980, the placement of percutaneous endoscopic gastrostomy (PEG) is accepted in children who require long-term enteral nutrition through gastrostomy. **Aim:** To discuss the current knowledge about PEG insertion in children, the associated complications and the ways of solving. **Method:** We reviewed the literature focusing on the potential benefits and parents' perceptions. Our 10-years experience was evaluated verifying the medical charts, surgical protocols and radiological examinations. **Results:** Between 2007-2017, 22 patients benefit from gastrostomy. 14 of them were done classical, 4 PEG and 4 laparoscopic assisted. Of these, 11 were patients with esophageal atresia, 8 patients had neurological problems, 1 patient with esophageal posttraumatic rupture, 1 patient with post-caustic esophageal ingestion, and 1 patient with short bowel syndrome. Evolution was favorable. Literature has many complications that we have not yet met. **Conclusions:** PEG is a safe and effective method for enteric nutrition feeding, the technique is minimal invasive and has rapid postoperative recovery, good esthetic appearances and simple nursing. PEG can significantly improve the patient's nutritional status and quality of life. Laparoscopic assisted gastrostomy is proposed just in cases of severe scoliosis or at-risk patients. Evolution is without major complications. We only encountered local areas of skin irritation which we treated with oxide zinc paste. Intraoperative and postoperative mortality was zero.

BOWEL PREPARATION FOR ENDOSCOPIC INVESTIGATIONS IN THE PEDIATRIC POPULATION: A PROSPECTIVE STUDY

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Introduction and aim. Conducting a study about pediatric bowel preparation represents a novelty in our clinic but also on a national level. Due to the more reduced patient adherence to treatment in pediatric population, there are no definitive protocols established. The purpose of this study is to analyze the results of bowel preparation for colonoscopy in order to contribute to the standardization of preparation methods for endoscopic investigations. **Methods.** A prospective study was conducted on the patients undergoing colonoscopy in the Endoscopy Service of the Clinical Emergency Hospital for Children “Grigore Alexandrescu” from July 2016 to July 2017. A form was filled for every patient describing: age, weight, indication for colonoscopy, comorbidities, the type of agent used for preparation and dosage, duration for preparation, associated enema administration, low-fiber diet for more than 3 days before colonoscopy, nasogastric intubation, type of colonoscopy, endoscopic procedures, complications during bowel preparation and the grade according to the Aronchick scale. **Results.** Complete data was obtained from 107 patients, aged 2 months- 17 years. The preparation for colonoscopy was performed using polyethylene glycol 4000 in 96 of the cases, 6 children received a combination of laxatives (sodium picosulfate, bisacodyl, lactulose, vegetal oils: paraffin oil, senna), and 8 followed a clear-liquid diet alone. Total colonoscopy was performed in 64% of the cases, biopsies

were made in 60 patients and 15 required polypectomy. The prescribed dosage of polyethylene glycol 4000 was 6.4 g/kg, while, on average, 5.95 g/kg were administered. 62.79% of the patients who received a dosage higher or equal to the prescribed one were evaluated as being well prepared, while only 41.53% of the ones who received a lower dosage were well prepared($p=0.17$). The patients who were prepared in more than one day presented a better view of the colonic mucosa ($p= 0.04$). The combination of laxatives and low-fiber diet did not influence the quality of the preparation. Nasogastric intubation was necessary in just 11% of the cases. Nausea and vomiting occurred in only 5% of the children. Conclusions: Polyethylene glycol is a safe agent to be used in pediatric bowel preparation, which was rarely administered by nasogastric intubation. The process is optimized when a dosage of minimum 6.4 g/kg is administered, fractioned on 2 or more days of preparation. The duration of preparation was the only statistically significant element regarding bowel preparation for colonoscopy.

ENDOSCOPIC TREATMENT OF VESICoureTERAL REFLUX – A COMPARISON BETWEEN STING AND HIT TECHNIQUE

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Introduction: Our study aimed to compare the efficacy of two endoscopic techniques used for the correction of vesicoureteral reflux (VUR): subureteral transurethral injection (STING) and hydrodistension implantation technique (HIT). **Material and Methods:** All the patients who underwent endoscopic VUR treatment, between January 2013 and January 2017 were retrospectively reviewed. A total of 119 patients were identified, but only 69 met the inclusion criteria – complete data on technique, used bulking substance, preoperative and follow up voiding cystourethrogram and postoperative complications. Patients were divided in two groups according to the endoscopic technique used. **Results:** From 2013 to 2017, 69 children (51 girls and 18 boys) aged 3 months – 14 years (mean 40.8 ± 34.5 months) underwent endoscopic treatment of VUR. STING technique was used for 37 patients (53.6 %), comprising 58 refluxing ureters. The HIT group had 32 patients (for 11 of these patients, the double HIT technique was used), comprising 54 refluxing ureters. The utilized bulking substances were dextranomer/hyaluronic acid (Deflux®) for 48 patients (69.5%) and polyacrylate-polyalcohol (Vantris®) for the remaining 21 patients. The overall resolution of VUR after first procedure was higher in HIT (78.1%) compared to STING group (54.1 %). There were no vesicoureteral junction obstruction cases in any of the two groups. **Conclusions:** HIT technique has better results compared to STING in correcting VUR, regardless of the bulking agent used.

THORACOSCOPY FOR PEDIATRIC PATHOLOGY – OUR EXPERIENCE

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Introduction: Thoracoscopy is a minimally invasive surgical technique which initially was used for diagnostic purposes only, but currently represents the standard in the surgical care of pulmonary empyema, tumors of the mediastinum, congenital lung malformations, esophageal atresia or diaphragmatic hernias, among others. **Materials and methods:** For the purpose of this presentation we have analyzed the thoracoscopic interventions in patients admitted between 2014 and 2017 in our Pediatric Surgery Department at Grigore Alexandrescu Children's Clinical Emergency Hospital. We examined the efficacy of the thoracoscopic approach, postoperative follow-up, length of stay, duration of pleural drainage and the rate of complications. **Results:** The study included 16 selected patients with age between one day and 15 years. Thoracoscopy was done in: 8 patients for pulmonary empyema, 2 patients for diaphragmatic hernia, 2 patients for bronchopulmonary birth defects, 2 patients for mediastinal tumors, 1 patient for esophageal atresia and in 1 patient with recurrent pneumothorax for pleurodesis. From the total number of cases, 1 had to be converted to thoracotomy and 2 patients needed a redo surgery, with the remaining patients (13) having a favorable postoperative evolution. **Conclusions:** The advantages of thoracoscopy are a better visualization of the thoracic cavity, smaller incisions with minimal scarring, reduction of the hospitalization with faster return to normal daily activities, lower rates of postoperative chronic pain and other complications.

BOWEL MANAGEMENT - REINTERVENTION RELATIONSHIP IN CASES OF ANO-RECTAL MALFORMATION

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Despite advances in the past 20 years, postoperative complications and unsatisfactory results in the patients with anorectal malformation (ARM) remain common. Between 1995 and 2015, 146 patients with ARM, 85 boys and 61 girls were treated in the Clinic of Pediatric and Orthopedic Surgery. The cases were classified according to Pena criteria. 142 children were treated with small interventions (colostomy 12 cases, miniPSARP 18 cases) or laborious interventions: PSARP 70 cases, PSARVUP 25 cases (11 cloaca, 14 rectovestibular fistula), PSARP+abdominal approach 15 cases, one case - the Mollard technique, one case - the Stephens technique. Conservative treatment was applied in cases complicated after surgical treatment: 27 cases with constipation (bowel management); another 15 patients underwent reintervention: one patient for post-operative faecal incontinence due to rectal malpositioning outside the muscular complex, 9 for unsatisfactory results related to the initial operation (lower rectum injuries), two cases for fistula (one recto-urinary and one recto-vaginal), vaginal atresia a case and rectal prolapse two cases. The postoperative results are difficult to appreciate, but we think they were good, with the objective to improve the continence, although the reinterventions have succeeded over several years.

CONGENITAL TRACHEOESOPHAGEAL FISTULA: A CASE REPORT

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Introduction: A congenital tracheoesophageal fistula is a condition that represents an abnormal communication between trachea and esophagus. Frequency is extremely rare (0,1%) and difficult to diagnose. The aim of this presentation is to present the importance of recognition of tracheoesophageal malformation in neonate and infant period. **Case Presentation:** A male patient of 1 year and 2 months was admitted in our clinic. He was known in his medical history with recurrent pulmonary infections and frequent admittances in another hospitals. At birth, he suffered meconium aspiration syndrome and he was checked for tracheoesophageal fistula using conventional radiology, but surgical and other examinations outcomes suggested gastroesophageal reflux and he was treated for that. Due to his recurrent evolution, he was admitted in Children Emergency Hospital of Cluj Napoca- Pediatric Pneumology. Bronchoscopy was performed and revealed a communication between esophagus and trachea with the significance of congenital tracheoesophageal fistula. CT scan was made to assess pulmonary complications- no complications were pointed out. Surgical treatment of tracheoesophageal fistula was carried out. His outcome was good and patient was discharged with good outcome. **Conclusion:** In conclusion, when recurrent respiratory infections are present in infant period, tracheoesophageal fistula must be considered, even if it's very rare.

UNUSUAL BRONCHOSCOPIC METHODS FOR EXTRACTION OF ENDOBRONCHIAL FOREIGN BODIES

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Introduction: Although more frequent in pediatric pathology, the presence of endobronchial foreign bodies can raise a series of management issues for the thoracic surgeon, because most of these foreign bodies are well tolerated and lead to retrostenotic suppuration, which can be the reason these patients are admitted. The surgeon must attempt the extraction via bronchoscopy and if not successful by thoracotomy. **Material and Method:** We analyzed retrospectively a series of 6 patients admitted in our unit with this pathology in the last decade. We excluded the patients that required thoracotomy. 83.33% of the patients were male; the mean age was 51.83 years. A patient was admitted with lung suppuration, the foreign body was identified via bronchoscopy. All the foreign bodies were extracted by bronchoscopy, 2 with rigid bronchoscopy. The materials used for extraction were the "crocodile" biopsy clamp in 4 cases, foreign body extractor in one case and a Fogarty catheter. **Results:** The extracted bodies were: a crayon fragment, a syringe needle, a pea, a peanut, a coin and bread core. Two patients required re-exploration for extraction of unnoticed remaining fragments. No ICU care was needed. The mean hospital stay was 3.66 days. Recorded mortality was zero. The patient with lung suppuration recovered well, with favorable functional outcome. **Conclusions:** Although rare in adults, the endobronchial foreign bodies are accompanied by complications. Being well tolerated initially, these can lead to chronic suppurations, bronchial stenosis that requires laborious surgery in the long term. The bronchoscopic examination is the gold standard, and the extraction, although not entirely easy, must be attempted. The thoracic surgery units must not be deprived of the presence of the bronchoscope, both rigid and flexible, and the range of extraction clamps must be wide, adapted to all shapes and sizes.

AFTER 30 YEARS ABOUT THE WILMS TUMOR

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Purpose. In the Oltenia region there was from the medical point of view an explosion of tumors in the child after the year 1986. **Material and method.** The paper aims to compare the evolution of incidence and therapeutic attitude over three decades by reviewing the cases in our clinic and reporting them to a multicenter study carried out a few years ago. **Results.** Significant progress has been made over the past decades in the Wilms Tumor due to the two multidisciplinary cooperative groups, the Société Internationale d'Oncologie Pédiatrique (SIOP) and the Children's Oncology Group [COG; formerly the Wilms Tumor National Study Group (NWTSG)]

MINIMALLY INVASIVE SURGERY IN CHILDREN - IS THAT THE WAY TO GO? - A TEAM EXPERIENCE -

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Since the first laparoscopy performed in our hospital, back in 2012, we gradually evolved to new types of approaches, extending the area of pathology and surgical procedures. We critically review our cases starting 2012 to date and analyze the types of surgeries performed, demographics, data regarding the learning curve. Despite different types of obstacles, our team managed encompassing the difficulties of the beginnings, to continuously improve and refine the techniques, gradually lowering the age of the patient as low as few ours after birth. The purpose of the paper is to present our interesting journey in the field, the difficulties of the past and present, the inevitable questions arisen during the time, the clinical and research results of the last 5 years.

CLOSTRIDIUM DIFFICILE INFECTION IN PEDIATRIC POLYTRAUMAPATIENTS –REVIEW OF LITERATURE AND CASE PRESENTATION

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Introduction: Clostridium difficile associated disease is a well recognized nosocomial infection evolving as a severe diarrheal illness, associated with significantly higher rates of morbidity and

mortality in critically ill patients. The incidence of *Clostridium difficile* infection is higher and its impact is more severe in trauma patients when compared with general inpatient population. Moreover, managing these patients may prove to be a very challenging task, considering the emergence of novel aggressive *Clostridium difficile* strains resulting in increased disease severity. Material and methods: Case presentation of a pediatric polytrauma patient with *Clostridium difficile* infection and review of literature. Conclusion: Polytrauma patients are at high risk for acquiring *Clostridium difficile* infection, which can have serious consequences on their status. Algorithms of rapid diagnosis and rapidly instituted effective treatment strategies should be well established for this category of patients.

EMERGENCY EMBOLIZATION IN A CASE OF WYBURN-MASON SYNDROME

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This case report presents a 11 y old girl with Wyburn Mason syndrome facing an acute oral bleeding episode from craniofacial left side AVM. The complex management of this situation involved in the same time both maxillofacial surgery team for acute stabilisation of the patient and 48 hours latter the neuroendovascular team for embolisation of the AVM through maxillary artery feeders. A total number of tree feeders were closed with Glubran-Lipiodol mixture and using the detachable tip micro-catheteres - technique mainly used to treat brain AVMs. Devascularisation around 75-80% was achieved and lead to no more bleeding episodes. Understanding of vessel anatomy and suitable embolisation technique of this young paediatric patient with Wyburn Mason syndrome was mandatory in order to provide an safe and efficient combined surgical and endovascular treatment.

SOLID NEONATAL TUMORS OF THE NEWBORN

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Introduction: Solid tumors discovered at birth or during the first months of life are uncommon. Most of them are benign. Malignant tumors in neonates represent only 2% of all malignancies in childhood. Material and method; An overview over the behaviour and their custom management was made. We reviewed our experience with solid tumors in the neonatal period and first 3 months of life according to International Society of Pediatric Oncology classification and selected the illustrative situations we encountered in the last 10 years. Results: Neuroblastomas were the most frequent – 24 cases, followed by sacrococcygeal teratomas – 14 cases. We encountered three cases of lipoblastoma, one case of hemangioendothelioma, one case of undifferentiated sarcoma, two cases of infantile fibrosarcoma and one case of hemangiopericytoma. ConclusionS: A multidisciplinary approach involving neonatology, radiology, oncology, pathology and surgery is required to outline the best diagnosis, evaluation and treatment plan. Some tumors that appear histologically malignant may show benign behavior, whereas apparently benign tumors may be fatal by virtue of their site of origin, which makes neonatal tumors one of the most difficult diagnostic and therapeutic challenges in pediatric oncologic surgery.

MASSIVE HEMORETROPERITONEUM -CASE REPORT

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Introduction: Hemoretroperitoneum can be caused by many conditions: some traumatic and some atraumatic, and can manifest itself differently, depending on the type of lesion, quantity of leaked blood and the period of time in which it occurred. **Material and method:** We present the case of a 14 year old girl, that was brought to the ER in hemorrhagic shock. Fast ultrasound shows massive hemoretroperitoneum and possibly a right renal artery aneurysm (RAA). CT - Massive right retroperitoneal hematoma, extended to the other side. Right kidney with structural disorganization (Right kidney trauma with right renal artery rupture?). Emergency surgery with midline laparotomy, exploration of the retroperitoneal space reveals right kidney with a hard, ruptured formation in the hilum. Right nephrectomy and control of the bleeding. Drainage of retroperitoneum and Douglas pouch. During surgery BP=50/30 mmHG, Hb=4,7g/dl. Intraoperative and postoperative: treatment with blood transfusions, correction of electrolyte and acid-base imbalance, antibiotics and analgesics. **Results:** Postoperative BP=185/110mmHg, corrected with antihypertensive agents, and uremia. Abdominal MRI reveals a partially clogged left RAA. We tried to transfer the patient to multiple Vascular and Cardio-Vascular Surgery Departments, but were unsuccessfully because of the lack of experience of endovascular surgery in children. Because of persistent uremia we transferred the patient to the Cluj-Napoca Nephrology Department, where she received treatment for the acute renal failure. **Conclusions:** Ruptured RAA in the pediatric population are extremely rare and are associated with collagen diseases. 20% of patients with RAA have the affliction bilaterally. Patients with RAA can undergo elective endovascular treatment, but the treatment should be adapted to the possibilities of the medical center.

ULTRASOUND DIAGNOSIS AND CORRELATION BETWEEN OBSTETRICAL TRAUMA AND NEUROLOGICAL DISORDERS

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Introduction: Obstetric traumas are neonatal disorders of multiple causes, often unpredictable, with implications for the clinical development of the newborn. Incidence is estimated at 2-7 ‰ live births, decreasing due to improved health care. Mortality 2-3% of all neonatal deaths, 5-8 / 100,000 through physical trauma, 25 / 100,000 through hypoxia. **Objectives:** The authors propose a review of severe forms of brain injury resulting from birth traumas, correlated with ultrasound monitoring and clinical evolution. **Results:** Depending on the degree of somatic and neurological maturity, respectively gestation age and birth weight, the conditions observed or caused by perinatal insult may be different. Also, the type of mechanical insult (physical or hypoxic) can cause different injuries depending on the intensity or degree of neurological immaturity. Both short-term prognosis and long-term neurological prognosis depend on the early diagnosis of these lesions (subarachnoid haemorrhage, subdural haemorrhage,

massive cerebral infarction, perinatal hypoxic-ischemic encephalopathy, grade IV intraventricular hemorrhage), the early establishment of the treatment and, if appropriate, the integration of the baby into the follow-up program and neurological dispensary. Conclusions: Cerebral trauma due to obstetric causes is still an important cause of infant morbidity and mortality. The most serious brain injuries secondary to severe perinatal insult are: subdural hemorrhage, massive cerebral infarction and severe perinatal hypoxic-ischemic encephalopathy, grade IV intraventricular haemorrhage.

COMPLEX HEAD-THORAX-ABDOMEN TRAUMA IN A 16-YEAR OLD CHILD-CASE REPORT

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Introduction: Polytrauma represents 20- 25% of total trauma cases in children. A multisystem imbalance is generated as a consequence of various mechanical, physical or chemical agents. There is a certain vital risk in severe trauma cases. **Material And Method:** We present the case of a 16- year old boy who was involved in crushing trauma accident with subsequent multiple (head- thorax- abdomen) trauma lesions. At admission he was in coma and required CPR maneuvers. Head- thorax and abdomen CT Scan exam was performed followed by emergent surgery. **Results:** The CT Scan exam showed multiple lesions before surgery: diffuse cerebral oedema, massive pulmonary haemorrhage, left diaphragm and spleen rupture with herniation of the stomach inside the thorax. Surgery consisted of laparotomy, splenectomy, suture of left diaphragm rupture, multiple drainage. The patient was admitted in ICU after surgery and received complex supportive treatment. The postoperative course was unfavorable with demise at 24 hours. **Conclusions:** Polytrauma is a medical and surgical emergency condition. A careful assessment is required before treatment. Severe cases can still present a vital risk due to the complexity of lesions.

CRUSH SYNDROME OF THE PELVIS AND RIGHT LOWER LIMB : A CASE REPORT

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Introduction: In the case of complex traumas with vascular, bone and muscle impairment, timely recognition of all lesions and prompt treatment of them can have consequences for the patient's life and bodily integrity. The purpose of this case report is the timely identification of a compartmental syndrome and the importance of interdisciplinary collaboration. **Case Presentation:** A female patient, aged 13 years, is sent from another medical service following a complex crash (cart accident) at the level of the pelvis and lower right leg, presenting comminuted open fractures, right femoral head dislocation, plaque delineating the right inguinal, perineal and anal region, intensely contaminated with dirt, thrombosis and extensive lesions of the external iliac artery and common femoral artery, with active hemorrhage in the right inguinal region and acute ischemia of the inferior right limb. Due to the complexity and severity of

the case, it requires vascular surgery consultation, that can not be performed by emergency, which will also contribute to the installation of lower limb compartment syndrome and at the same time complications of the subsequent treatment. Because no surgical intervention can be performed, until the hemodynamic stabilization of the patient is obtained. After the restoration of arterial flow, follows the treatment of compartment syndrome and pelvic fractures, which will partially conserve the function of the inferior limb. After 6 weeks of apparently favorable evolution, thrombosis of the graft is observed, again taking into account the amputation of the lower limb, but due to the developed collateral circulation, the team manages to save it. Conclusions: the importance of multidisciplinary collaboration both as a reaction time and as an effective one.

MECHANICAL COMPLICATIONS OF VENTRICULO-PERITONEAL DRAINAGE SYSTEMS IN CHILDREN WITH HYDROCEPHALUS

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Introduction: Ventriculoperitoneal (VP) shunt is the most commonly utilized shunting procedure because of the capacity of the peritoneum to resorb fluid. Initial and subsequent peritoneal catheter placements can be done with relative ease. They are associated with a variety of complications. The purpose of treatment in hydrocephalic infants is creating an alternate path of CSF circuit restoring the physiological balance between production, flow and absorption. There are various means to achieve this goal: using a ventriculoperitoneal/ventriculoatrial drainage system or by endoscopic third ventriculostomy. **Materials and Methods:** The total number of patients operated in the study period was 28. We studied the operated patients of VP shunt who had various shunt system-related complications and other related studies published in last 5 years and analyzed the predisposing risk factors and spectrum of complications. **Results:** The age was 2 days to 14 years old patients out of which 18 were males and 10 females. The etiology of hydrocephalus was aqueductal stenosis in most (12) of the cases, Arnold Chiari malformation in 2, postmeningitis in 2, postintraventricular hemorrhage in 8 patients and postencephalocele surgery in 4. The mechanical complication developed at 10 patients. Inserting a ventriculoperitoneal drainage system implies a number of neurosurgical procedures resulting in clinical improvement of patient's condition but on the other hand, it presents certain disadvantages such as mechanical complication or infection. The latter is the most severe complication associated with shunts and is responsible for seizures, cognitive impairment and high mortality rate. The mechanical complication on the other hand are more often and have a various causes, from valve malfunctions caused by different etiology (e.g. the high content of protein in CSF to the migration the tip of the catheter). **Conclusion:** With this retrospective review of complications of VP shunts, age at initial shunt insertion and the interval between the age of initial shunt placement and onset of complications were the most important patient-related predictors of shunt failure. The different predominant etiological factors responsible for early and late shunt failure were infective and mechanical complications, respectively.

BURN INJURIES IN CHILDREN: A 5 YEARS RETROSPECTIVE REVIEW

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Abstract: Children are considered a risk group for burn trauma because most of them cannot protect themselves. Outcomes of patients with burns have improved substantially over the past two decades. We included in our study 393 patients presented in the Department of Pediatric Surgery of the Emergency

County Hospital Târgu-Mureș between 1st of January 2011 and 31st of December 2016, diagnosed with burn injury. Our study covers all pediatric patients treated in our service, with burns that interest up to 20% of body surface area, not including burns of the face or genitalia. A total of 90 (22,9%) needed hospitalization. Analyzing the distribution of the pathology by sex, the data emphasize a proportion of 53,43% in the male population. A proportion of 61,32% provided from rural areas. A number of 21 cases were handled together with the plastic surgery department. The children's desire to explore determined the location of burns predominant at the level of the upper limbs. Much of these trauma can be ambulatory treated. We believe that prevention of these types of injuries should be done in a very serious way.

LATE POSTTRAUMATIC COMPLICATIONS IN CHILDREN – RADIOLOGICAL ASPECTS

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The leading cause of mortality in the pediatric population is trauma. Late abdominal posttraumatic changes are responsible for a variety of associated complications and morbidity. The aim of the presentation is to review the most common types of injury with a focus on key features of the initial evaluation and management clinico-imagistic

TRANSMESOCOLIC DOUBLE GASTRO-ENTERIC FISTULA DUE TO INGESTION OF 28 MAGNETS IN A 17 MONTHS OLD BOY-CASE PRESENTATION

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Introduction: Accidental ingestion of magnetic foreign bodies has become more common due to increased availability of objects and toys with magnetic elements. The majority of them traverse the gastrointestinal system spontaneously without complication. However, ingestion of multiple magnets may require surgical resolution. **Case report:** We report case of a transmesocolic double gastro-enteric fistula formation following ingestion of 28 small magnets in a 17 months old boy. No history of foreign body ingestion could be obtained from parents therefore the patient was treated conservatively in a pediatric clinic for vomiting, dehydration, upper respiratory tract infection and suspicion of upper digestive tract bleeding. After 48 hours he was sent in our clinic for surgical evaluation. Intraoperatively double transmesocolic gastro-enteric fistula was found. After separation of the gastric and enteral walls, resection of gastric wall and intestinal segment containing the two perforations was performed, followed by gastric suture in two layers and entero-enteric anastomosis. A total of 28 magnets were removed from the stomach and small intestine. **Conclusion:** Single magnet ingestion is treated as non-magnetic foreign body. Multiple magnet ingestion should be closely monitored and surgical approach could be the best option to prevent or to cure its complications.

LAPAROSCOPIC APPROACH IN UNDESCENDED TESTIS –OUR EXPERIENCE

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Introduction: Cryptorchidism represents one of the most frequent congenital anomaly of the external male genital organs. It is necessary for an early diagnostic and to take therapeutic actions because the anomaly can generate some risks, the most important of them are infertility and the possibility of testicular tumors cases. If initially the laparoscopic approach was a method of diagnostic and patient evaluation now it represents a method of treatment. Laparoscopic orchidopexy offers a series of advantages regarding postop recovery. **Methods and materials:** We retrospectively studied patients with undescended testis from April 2014 to October 2017. We studied a series of parameters including: uni or bilateral case, the existence or absence of the testis in the abdominal level, the type of surgery, days of hospitalization, postop complications and the necessity of painkillers. **Results:** In our clinic were made 120 procedures regarding the treatment of cryptorchidism. 26 of them were laparoscopic and the rest of 94 were classic orchidopexy. The age of the patients were between 11 months and 15 years old with a higher frequency between the ages 1-5 years. The bilateral cases were about 13% from the cases included in the study and right cryptorchidism represents 62% of the cases. Regarding the days of hospitalization the average number of days were 3 regarding the laparoscopic procedure and 4 days for the classic orchidopexy. The minimally invasive technique leads to lesser complications and the limitation of painkillers administered postop. **Conclusions:** Cryptorchidism can be diagnosed and treated laparoscopic and the advantages are the lesser days of hospitalization, faster recovery and lesser post op risks.

MANAGEMENT OF CHILDREN AND ADOLESCENTS WITH DIABETES MELLITUS TYPE 1 UNDERGOING SURGERY

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Introduction: Presently, the management of type 1 Diabetes Mellitus (type 1 DM) in children and adolescents includes a wide range of insulin products, insulin delivery devices and therapeutic regimens. Therefore, it is essential that the whole medical team involved in the treatment of children with Type 1 DM who require surgery, to know all about this. **Material and methods:** This paper presents a short analysis of the main international recommendations regarding this particular situation. Aspects of pre-, intra- and postoperative care in emergency as well as planned surgical interventions are debated. **Results:** The differential diagnosis of the surgical acute abdomen and the symptomatic like-acute abdomen in patients with diabetic ketoacidosis can be a real challenging for even the most experienced surgeon. Whenever possible, surgery on children with diabetes: should be performed in hospitals with

appropriate trained personnel and care facilities; planned surgery should be scheduled as the first on the surgical list, in the morning; emergency surgery should not be postpone due to the chronic related pathology. Frequent blood glucose monitoring is essential for insulin dose calculation and for achieving a pre-, intra- and post-operative good blood glucose control. Conclusions: The literature data on this subject are scarce. It can be useful to have written protocols for management of children and adolescents with Diabetes Mellitus Type 1 undergoing surgery based on the Romanian medical system reality.

CHALLENGES IN THE MANAGEMENT OF PRIMARY SPONTANEOUS PNEUMOTHORAX IN CHILDREN

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Introduction: Taking into consideration the fact that spontaneous primary pneumothorax in children is a rare condition, but which involves significant long-term morbidities due to its consequent implications, it is crucial to analyze the hospital's experience in order to improve the medical assistance of these patients. **Materials and methods:** The study included twenty two cases admitted to the Clinical Emergency Hospital for Children “Grigore Alexandrescu” for primary spontaneous pneumothorax from the first of January 2012 until the thirtieth of June 2017, their ages ranging from twelve to seventeen years old. The information was gathered retrospectively and it included the following: the side of the pneumothorax, the severity of the symptoms, associated conditions, and pathological changes identified in paraclinical investigations, length of stay, requirement of tube thoracostomy, duration of catheter placement, recurrences, time until recurrence, requirement of surgical treatment. The data was interpreted by using descriptive statistics and “chi square” test. **Results:** The average age of the patients was 15 years and the cohort consisted of 83% male patients. The most frequent side of the pneumothorax was the right one, in 48% of the cases, and the average length of stay was eleven days. The criteria for chest tube drainage were the severity of the chest pain and associated respiratory distress, and the average duration of thoracostomy was 8.5 days. Thoracic CT scan was indicated in 35% of the patients, in case of bilateral or massive pneumothorax, and it identified pathological findings, such as subpleural blebs, pleural adhesions, and atelectasis, in three patients. Furthermore, these patients presented complicated pneumothorax, meaning hemopneumothorax, two of whom required red blood cells transfusion. There was no statistically significant association between the size of the pneumothorax or the bilateral location and the need for chest tube drainage ($p=0.78$). **Conclusions:** The first measure in case of pneumothorax manifested by dyspnea and chest pain without release after conservatory treatment is chest tube drainage, even in the case of the first recurrence, and it can be maintained for up to 10 days. If there is no resolution after thoracostomy, then thoracoscopic surgery is needed. The difficulty in managing these patients resides in the fact that there are no predictive factors for patients requiring surgical treatment as the final cure for primary spontaneous pneumothorax. Complicated pneumothorax requires thoracoscopic surgery for extracting the blood clot in order to produce pulmonary expansion.

OLD AND NEW IN HYPOSPADIAS

C.Tica

The paper analyzes the current trend in hypospadias correction surgery, there is no consensus for solving this condition. Surgical treatment tendencies have undergone, over time, changes in technique-tests, multistage, as well as the age of surgical intervention. Lately, there are groups that return to multistage surgery. As a conclusion, there is no universal surgical technique, the technique being adopted on a case-by-case basis.

THE EFFECTIVENESS OF HUMAN CHORIONIC GONADOTROPIN FOR UNDESCENDED TESTIS: AN EXPERIMENTAL STUDY

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Introduction: Human chorionic gonadotropin hCG has been used extensively all over the world as single or pre-surgery treatment for undescended testis in children. However, there is no consensus over the benefits of hCG treatment in children with undescended testis. Moreover, there are some scientific opinions that more hCG has more negative effects than benefits. The purpose of this study was to evaluate the effect of HCG injection on lab rats. **Material and methods:** We have injected hCG solution 100UI/Kgc in 10 Sprague-Dawley rats 5 consecutive weeks 2 times/ week. After an additional 3 weeks, we elongated one of the spermatic cords with approximately 50% of its initial length and fix it to the back of the thigh. The similar procedure was performed in 10 non-injected rats (control). After 30 days, the rats were euthanized, macroscopic and microscopic evaluation of the testis was performed. **Results:** Macroscopic the elongated testis were significantly smaller than the normal ones in both experimental and control groups. Light microscopy of the specimens from the elongated testis revealed in both groups' signs of atrophy and normal contralateral testicle without differences between groups. **Conclusion:** Our results shows that HCG has no effect on the spermatic cord and testis in lab animals suggesting that its use in children with undescended testis is ineffective.

APPENDICITIS OVERCOMES NEGLECT –A CASE REPORT

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Dysgerminoma is a malignant germ cell tumor originated in the ovarian tissue, accounting for less than 1% of all ovarian tumors, and fewer than 10% are occur in pre-pubertal girls. We are reporting the case of an 8-year-old girl, referred to our Clinic from the Oncology department. The girl had a large

abdominal tumor ranging from the pelvis into the upper abdomen, abdominal pain and tenderness, anemia, and malnourishment. After a complete biological assessment, we explored the peritoneal cavity via laparoscopic approach. Because of the size of the pelvic mass that was indistinguishable from the left ovary, we converted to open median laparotomy, and find out the cause of the abdominal pain and tenderness, acute appendicitis. The patient has undergone total resection of the tumor, appendectomy lavage and drainage of the peritoneal cavity. The histopathological exam revealed that the tumor is a dysgerminoma. The patient was re-admitted in the Oncology department for further chemotherapy treatment.

MANAGEMENT OF PARAPNEUMONIC EFFUSIONS IN CHILDREN

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Introduction: Pneumonia is a frequent cause of admission in the pediatric population. Half of the patients diagnosed with pneumonia develop parapneumonic effusions, most of them not needing surgical intervention. The surgical management of parapneumonic effusions is controversial, varying from thoracentesis, pleural drainage, fibrinolytic therapy to pleural decortication via thoracoscopy or thoracotomy. **Materials and methods:** We reviewed the cases of parapneumonic effusions admitted in „Grigore Alexandrescu” Clinical Emergency Hospital for Children from January 2012 to June 2017 and analyzed the indication and the procedure used. **Results:** There were 85 admissions with the diagnosis of pneumonia and parapneumonic effusion. 36 patients needed surgical intervention for the effusion. The mean age was 4,36 years (6 months – 17 years). 22 cases were right-sided pleural effusion, 12 were left-sided and 2 were bilateral. In 28 cases pleural drainage alone was performed, pleural decortication via thoracoscopy alone in 3 cases, and in 5 cases pleural drainage followed by pleural decortication via thoracoscopy was performed. The meantime lapsed from admission to pleural drainage was 2,10 days (0 – 13 days), and from admission to thoracoscopy was 8,3 days (0 – 27 days). The mean pleural drainage period was 19,3 days for the pleural drainage group, 14,5 days for the thoracoscopy group respectively. The mean hospital stay after the procedure was 31,3 days after pleural drainage, and 26,5 days after thoracoscopy. **Discussions:** The procedures used was pleural drainage alone, pleural decortication via thoracoscopy (from 2014) and pleural drainage followed by pleural decortication via thoracoscopy. The mean pleural drainage period and the mean hospital stay after the procedure were higher in the pleural drainage group compared to the thoracoscopy group. **Conclusions;** Pleural decortication via thoracoscopy seems to be more effective than pleural drainage alone in the management of parapneumonic effusions in selected cases.

PROBLEMS APPROACHING A SYNDROME OF TOTAL ANDROGEN INSENSITIVITY

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Complete androgen insensitivity syndrome (CAIS) also known as “testicular feminization syndrome” was described by Morris in 1951 and is an X-linked recessive disorder caused by a mutation in the gene encoding the androgen receptor resulting in total androgen resistance. It is characterized by the presence of female phenotype with a 46XY-karyotype and is a rare cause of presentation in emergency in the pediatric surgery department. We present a case of a girl 11 years old who presented in emergency in our department as bilateral inguinal hernia with gonads palpable at internal inguinal ring. The diagnosis of CAIS was established at surgical intervention of hernia repair and confirmed through genetic tests. We choose not to perform gonadectomy due to lack of parents consent. However there is a controversy in timing of gonadectomy over the years in which some advocate for gonadectomy before puberty to decrease the risk of malignancy, while others are in favor of delaying gonadectomy to allow for spontaneous puberty. We review the data from the literature regarding this approach and present the lesson we have learn from this case.

LAPAROSCOPIC VS. OPEN APPENDECTOMY IN CHILDREN: OUTCOMES BASED ON AGE, GENDER, PERFORATION AND COMPLICATIONS RATE, OPERATIVE TIME AND HOSPITAL STAY-COMPARATIVE STUDY FROM SINGLE CENTRE

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Introduction: Study evaluated the outcomes of open appendectomy (OA) and laparoscopic appendectomy (LA) by analyzing the data from single centre. **Material and methods:** Prospective comparative study analyzed 334 children under 18 years, who underwent surgery for acute appendicitis (AA) during the period of two years (2015-2016). The patients were divided in two groups: OA (group 1) was performed in 286 vs. LA (group 2) in 48 patients. The analyzed variables included: age, gender, operative time, perforation and complications rate and total hospital stay. The study was approved by Ethical Committee. **Results:** Children who underwent OA were slightly older (mean age 10.72 vs. 9.97 years). There was no mortality.

	OA (group 1)	LA (group 2)	p
AGE (n,%) 0-5 years	19 (7,36)	4 (8,33)	0,926
6-10 years	110 (38,46)	14 (29,16)	0,541
11-17 years	157 (54,89)	30 (62,5)	0,678
GENDER (n,%) m	151 (52,79)	23 (47,91)	0,899
f	135 (47,21)	25 (52,08)	0,772
Complications rate (%)	12,50	17,48	p<0,001
Perforation rate (%)	25,87	10,41	p<0,001
Operative time (min)	46,12±15,33	62,34±21,52	p<0,001

Hospital stay(days)	7,11±2,54	3,22±1,12	p<0,001
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Conclusion: There were no significant differences in gender and age. The advantages of LA vs. OA are lower perforation and complications rate, shorter operative time and hospital stay, and therefore LA should be a first therapeutic option in the treatment of AA in children. The lower perforation rate in patients with LA is mainly result of a critical surgeon's decision to perform the OA in child with suspected perforation due to limited experience.

LAPAROSCOPIC APPROACH IN IMPALPABLE TESTIS IN CHILDREN

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Undescended testis, congenital or acquired, is a major risk factor for infertility. Therapeutic attitude regarding this condition has been reconsidered by numerous times regarding testicular descending and orchidopexy. A special place among the undescended testis cases is occupied by the impalpable testis that has often lends itself to confusion with anorchidia. In recent years, thanks to many technical advances testes that were considered to be absent (anorchyd) proved to be actually located intraabdominally and then can be lowered in the scrotal pouch in one or two surgical stages. The primary purpose of the treatment is to achieve a normal, or at least improved fertility. The authors present the experience of the Pediatric Surgery department of the Clinical Emergency County Hospital Craiova regarding the laparoscopic approach of the impalpable testis cases in children in the last two years.

OROFACIAL CLEFTS IN CHILDREN - CLINICAL AND TERAPEUTICAL ASPECTS

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Orofacial clefts represent a congenital malformation with a particular impact, not only from the aesthetic point of view, but also from the functional point of view, with profound repercussions on the child's psychosomatic development. The therapeutic approach to these congenital defects of the cranio-facial structures requires a close collaboration between the pediatric surgeon, the orthodontist, the logoped, and it is often necessary even a psychological approach to these cases. The authors are presenting the experience of the Pediatric Surgery Clinic of the Craiova Emergency County Hospital in the surgical approach of the cases of orofacial clefts in the last ten years

PROBLEMS OF DIFFERENTIAL DIAGNOSIS IN CASES OF ACUTE CHOLECYSTITIS IN A TEENAGER

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Acute acalculous cholecystitis (AAC) is the inflammation of the gallbladder, not associated with the presence of gallstones. In childhood, AAC is the most frequent form of acute cholecystitis (50% to 70% of all cases), differently from adult population, where the production of gallstones represents the main pathological mechanism inducing the disease. In adults, AAC represents only 5–10% of all cases of cholecystitis. The disease was initially recognized in the clinical setting of the critically ill patient, after major surgery or because of multiple trauma or extended burns. In these medical conditions, the prognosis of AAC is often concerning, as the overall mortality rate is estimated to be greater than 30%. The main risk factors for AAC in children are prolonged fasting, total parenteral nutrition, intravenous opiate narcotics, volume depletion (shock), multiple transfusion, and sepsis. Ischemia, infection and vesicular stasis are determinants in its pathogenesis. There are cases of pediatric AAC which have been described in otherwise healthy patients, without underlying diseases leading to the impairment of immune system or promoting the onset of acute complications. Many bacterial infections (leptospirosis, tuberculosis, bacterial enteritis, typhoidal or nontyphoidal salmonellosis, brucellosis) and viral illnesses too (especially EBV), have been reported as being causative of AAC. During viral illnesses, the concomitant intrahepatic cholestasis could cause some alterations of the concentration and the composition of the bile, and the stasis of such an altered bile in the gallbladder might induce a mucosal injury of vesicular wall, leading to acute inflammation, namely AAC. The clinical presentation may be quite unspecific, depends on the predisposing conditions, and the diagnosis can be challenging. The diagnosis of AAC is usually obtained through abdominal ultrasonography, which can reveal the following findings: increased gallbladder wall thickness (>3.5 –4 mm), pericholecystic fluid, presence of mucosal membrane sludge, in addition to the absence of gallstones. In AAC arising in previously healthy children the clinical management is usually conservative, reserving cholecystectomy for patients with vesicular gangrene or perforation. Although the AAC is a rare entity in children, it must be considered among the causes of acute abdominal and chest pain, especially in the presence of cholestatic syndrome. We present the case of an adolescent with intense abdominal and epigastric pain, but also with some paraclinical particularities, which raised issues of differential and etiological diagnosis.

SCAPHOID TYPE MEGALOURETHRA IN A CHILD WITH CONGENITAL LUES – CASE REPORT

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Megalourethra is a rare congenital penile malformation, which may be present in two types: the scaphoid shape showing better prognosis and the fusiform shape showing worse prognosis, developing urinary incontinence and erectile dysfunction. Both forms have surgical treatment indication. We present the case of a patient, 1 year old male from a pregnancy with maternal lues, examined during the neonatal age for the presence of a marked distal penile dilation. The patient received treatment for lues, investigations were conducted to exclude associated malformations or changes induced by congenital lues. The surgical indication was established at 1 year of age. Before operation, the patient was investigated with blood samples, genetic examination, abdominal ultrasound, scrotum ultrasound, penile ultrasound, voiding urethro-cystography, urinary endoscopy, establishing the positive diagnostic of scaphoid megalourethra. Under general anesthesia, reductive urethroplasty was achieved on a urinary catheter Nelaton Ch 10. A conical glans was obtained with cutaneous tissue plasty. The postoperative progression was favorable with good voiding stream, without fistulas, without penile shaft deviations, with normal erections. The patient should be followed up periodically to assess progress. In conclusion, the presented case is a rare clinical situation, associating a congenital penile malformation with low prevalence in a child with congenital lues, where surgical treatment led to healing and favorable evolution.

POSTER PRESENTATION

EFFECT OF SOME TERPENES ON IN VITRO PERCUTANEOUS PENETRATION OF PROPRANOLOL HYDROCHLORIDE FROM TOPICAL HYDROETHANOLIC GELS

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Introduction. Recently, it has been evidenced that some beta-blockers, particularly propranolol hydrochloride (PRHCl), are effective after oral administration in the treatment of infantile hemangioma, due to their antiproliferative effect. However, at oral administration, PRHCl exhibits disadvantageous pharmacokinetic properties (extensive hepatic first pass metabolism and short half-life) and a number of side effects. Therefore, topical administration of PRHCl is considered to be an alternative to the oral route, as evidenced by recently published studies. However, low percutaneous penetration of PRHCl, determined by its polar, hydrophilic character, should be increased by addressing different strategies, such as the use of terpenes as penetration enhancers. The objective of this study was to investigate and compare the percutaneous penetration enhancement effect of four terpenes from the group of alcohols (citronellol, geraniol, linalool and nerolidol) on PRHCl from hydroethanolic gels. **Material and methods.** Hydrogels based on 1.5% hydroxypropylcellulose and containing 3% PRHCl, 5% terpene and cosolvents (50% ethanol and 10% propylene glycol) were prepared and evaluated for physicochemical properties and in vitro permeation of PRHCl through excised pig ear skin, using Franz diffusion cells. Permeation and release parameters of PRHCl from hydroethanolic gels with and without penetration enhancer were calculated. **Results and discussions.** The obtained results showed that all studied terpenes increased the in vitro permeation of PRHCl through the porcine skin, acting as penetration enhancers. Citronellol, geraniol and linalool have been shown to be more effective penetration enhancers than nerolidol, producing higher values of the flux through the skin and of the release rate. **Conclusions.** The obtained results suggest that the incorporation of the three terpenes (citronellol, geraniol and linalool) into hydroxypropylcellulose-based hydroethanolic gels significantly increases the in vitro permeation of PRHCl through the porcine skin.

ORIGINAL SURGICAL METHOD FOR TREATING RECURRENT PARIETAL EVENTRATION IN BABIES

C. Neamțu

Inguinal hernia in children can be associated with anemia and/or hypoproteinemia. These kind of conditions can cause a bad evolution, with multiple surgical interventions (recurrent dehiscence, infected surgical wound, dehydration). It is possible to be present a vicious circle: recurrent dehiscence is explained by hypoproteinemia, but multiple surgical interventions can lead to hypoproteinemia, together with severe anemia. Out of necessity we have used a new method for solving recurrent ventral eventrations in babies, involving a novel technique of parietal suturing using silicone tubes.

MULTIPLE CONCOMITANT FRACTURES OF THE SAME EXTREMITY

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Introduction: Multiple fractures of the same extremity in the pediatric population add new dimensions to the problem of their diagnosis and management. **Material and methods:** Case presentation of two patients with multiple fractures of the upper extremity. **Conclusion:** Careful examination of the pediatric patient needs to be done in order to diagnose all lesions after a trauma. Multiple fractures of the same extremity can pose problems of diagnosis and treatment. We emphasize the need to clinically examine the whole extremity in severe injuries. The awareness of such an association for early recognition is paramount for excellent clinical results. **Key words:** pediatric trauma, multiple concomitant fractures, extremity

ACUTE GENERALIZED HEMATOGENOUSOSTEOMYELITIS OF THE RIGHT ARM WITH MRSA INFECTION IN A TWO YEAR OLD

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Osteomyelitis is a rare infection of the bone. Infection from one part of the body can spread through the blood stream into the bone, open fracture or surgery may also expose the body to infection (3). Osteomyelitis is a serious condition that refers to bone inflammation that is almost always due to infection typically bacterial but can sometimes have fungal implication (3). Pyogenic osteomyelitis is the bases of our study. Drainage of subcutaneous and subperiosteal abscess of the right upper arm, elbow and forearm was required, 2 days later incision and drainage of the collarbone was deemed necessary because of swelling, tenderness and redness. A large quantity of Pus was found under considerable pressure, 2 drill holes down the medulla (at the upper arm and elbow) were considered necessary to release intramedullary abscess, 4 drainage tubes were placed (1 at the collarbone, 1 at the upper arm passed downwards and exited to the elbow, 2 at the forearm). One for flushing (From the upper arm to the elbow) initially with 80mg of gentamicin dissolved in 500 ml of saline solution. This was switched to vancomycin 2 days after surgery according to culture and sensitivity result. Flushing was stopped on 14th postoperative day. Subcutaneous, subperiosteal and intramedullary pus were taken for culture and sensitivity during surgery. Post-operation prolonged fever warranted blood culture.

INTESTINAL ATRESIA TIPE III B IN ASSOCIATION WITH GASTROSCHISIS – A CASE REPORT

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Background. Gastroschisis is the most common congenital pathology of the abdominal wall, but the association with intestinal atresia is found in only 10-20% of cases, with a high mortality and morbidity risk. From 2004 to 2016, 93 cases of gastroschisis were admitted in our clinic and 6 (6.45%) of them presented intestinal atresia. **Case report.** We report the case of a new born baby girl who was diagnosed at birth with gastroschisis. She was born at 33-34 weeks, weighing 1250 grams and was transferred to our clinic at 1 hour of life for surgical management. On admission the patient presented with a right paraumbilical wall defect of 1.5/1.5 cm, with exteriorised volvulated and necrotic small bowel loops and colon, with the appearance of a type IIIB intestinal atresia. After resection, a jejunocolic end-to-end anastomosis was performed. The remaining bowel length was of about 25 cm. The postoperative evolution in the neonatal intensive care unit was favorable. The patient required parenteral feeding for 8 days, with enteral feeding being gradually started. The patient is now fed exclusively enterally and was diversified at 7 months of age, with favorable weight gain (5.6 kg), but requires antidiarrheal treatment (Loperamid, Smecta) as she presents about 5-6 loose stools daily. **Discussions.** Due to the fact that our patient presents with small bowel syndrome which requires continuous medical attention, we discuss the possibility of further surgical treatment, such as lengthening enteroplasty (Bianchi procedure) or STEP procedure, both resulting in caliber reduction and bowel lengthening, with the risk of intestinal stenosis and adhesions.

FETAL NEUROBLASTOMA -A MULTIDISCIPLINARY APPROACH CASE REPORT

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Neuroblastomas are embryologic tumors that arise from undifferentiated nerve cells of the adrenal medulla or the sympathetic ganglia in the abdomen, thorax, neck and head. They represent approximately 20% of the pediatric tumors and they are the most frequent malignancy in the neonatal period. The incidence is 1:10.000 - 1:100.000 births. In 90% of cases the primary site is represented by the adrenal gland. Some studies showed a link between neuroblastomas and 1p deletion or N-myc amplification. In the vast majority of cases, neuroblastomas are isolated, but occasionally they are associated with other fetal anomalies. The appearance is that of an encapsulated tumor, well delimited from other organs, cystic (better prognosis) or solid or with calcifications in the mass, ranging from a few millimeters to a few centimeters. In some cases a neuroblastoma can regress spontaneously during fetal life or after birth. The differential diagnosis includes: adrenal hematoma, renal anomalies, hepatic tumors, extralobar pulmonary sequestration, mesenteric cyst and so on. Staging of neuroblastomas is done according to the Evans criteria or that of the International Neuroblastoma Staging System. It can lead to following complications: mechanical (due to compression exerted on adjacent anatomic structures), biochemical (due to catecholamines released in the fetal or maternal circulation) and metastatic (local, distant or even in placenta and umbilical cord). The prognosis is much better if the diagnosis is made sooner (prenatally or in the 1st year of life), if the stage is lower with no biochemical complications and the appearance is cystic rather than solid. We present a case of fetal neuroblastoma of the right adrenal gland, Evans stage I, diagnosed prenatally in the 3rd trimester, during a routine fetal ultrasound. It appeared as a cystic and well encapsulated tumor, with no Doppler signal, 15 mm in diameter, well delimited from other organs, located above the right kidney. All differential diagnosis

were taken into account. The pregnancy continued until term without complications and a female fetus was born. The neonatal period was uneventful. In the 7th day of life the newborn was admitted in the pediatric surgery unit and radical surgery was performed on the 14th day of life with no complications. Histology confirmed the diagnosis. The suckling is being followed up with good clinical outcome so far. We'd like to underline necessity and utmost importance of a multidisciplinary approach regarding prenatal diagnosis, differentials, patient counseling, prognosis, treatment, follow up and recurrence risk. To ensure a good basis for a correct conduct the medical team must include a maternal-fetal specialist, a radiologist with fetal MRI knowledge, a neonatologist with access to NICU, a pediatric surgeon, a pediatric oncologist and laboratory (with the possibility of genetic testing).

ROLE OF THE GONADAL VEIN IN PORTAL VEIN THROMBOSIS WITH CAVERNOUS TRANSFORMATION – CASE REPORT

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Portal Vein Thrombosis (PVT) with Cavernous transformation is the primary cause of Portal Hypertension in the pediatric patient benefiting from surgical management. Surgical treatment in these cases consists in performing a shunt meant to lower the pressure in the Portal Venous System thus reducing the risk of bleeding from rupture of esophageal varices. To accomplish these shunts, a number of surgical techniques are described in literature, most commonly used: Warren Shunt, MezoREX Shunt, TIPS (Transjugular Intrahepatic Portosystemic Shunt). In this paper we present the case of a 4 and a half years old female patient who suffers from PVT with Cavernous Transformation and benefited from a Splenorenal Shunt using the Right ovarian Vein – a new surgical technique, easy to achieve compared to existing techniques and with just as good results.

SPLENECTOMY IN PATIENTS WITH HEMATOLOGICAL DISORDERS

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The aim: To analyze the procedures and postoperative evolution of patients that underwent splenectomy for hematological disorders. Methods: A retrospective study was done and it included all patients that underwent splenectomy admitted to "Louis Turcanu" Emergency Clinical Hospital for Children Timisoara, Romania in between 2008-2017. The items researched included etiology, type of splenectomy, days of hospitalization, complications and evolution. Results: Out of a total of 10 patients with splenectomy diagnosis was of: 20% (2) accessory spleen, 20% (2) posttraumatic spleen rupture, 10% (1) epithelial splenic cyst and 50% (5) hematological diseases (idiopathic thrombocytopenic purpura –PTI and hereditary microspherocytosis). All patients with hematological diseases were operated. Classical splenectomy was done, the mean age was 8 years old in patients with PTI and 9 years for

patients with hereditary microspherocytosis. The mean number of hospitalization days was of 14 days in patients with hereditary microspherocytosis and about 27 days for those with PTI. Both groups of patients received treatment with antibiotics and analgesics. And all patients benefited from postsplenectomy vaccine prophylaxis. We encountered secondary anemia and secondary thrombocytosis for patients in PTI, in patients with hereditary microspherocytosis we encountered mechanic icterus. Conclusions: Splenectomy remains a gold standard in the treatment of hematological diseases concerning the spleen that don't respond to medical treatment. Postoperative complications are redoubtable. The evolution in time was favorable. The postoperative results are very good leading to the end of the medical treatment.

BONE CYSTS. MINIMALLY INVASIVE APPROACH

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Intruduction: The reason of this study was to analyse the frequency of bone cysts appearance according to gendre, age and anatomical segment over 'Louis Turcanu ' Children Emergency Hospital pacients for a 6 years period, but also over the minimally invasive treatment applied. **Material and method:** Has been performed a retrospective study over a 6 year period , from the January 2012 until October 2017 for pacients with bone cysts. The distributions were evaluated on gendre, age, anatomical segments amd treatment applied in Timisoara clinique. **Results and discussions:** The study includes 25 patients with bone cyst. Between 1 january 2012 – 31 october 2017, were evaluated 25 cases of bone cysts. From all of these cases, 4 patients were younger than 10 years old , 16 patients were between 10 and 15 years old and 5 patients over the age of 15, with a distribution on gendre favorable for male sex. According to anatomical localization, of the bone cyst: ulna (1 pacient), humerus (5 patients), tibia (10 patients), femur (8 patients), other – distal phalanx of the hand (1 pacient). The bone biopsy has been made for 13 cases, bone excision for 7 cases , and patient monitoring for 5 cases. **Conclusions:** For a 6 year period, in 'Louis Turcanu ' Children Emergency Hospital from Timisoara, have been treated and watched 25 cases of bone cysts. An increased incidence was observed at the age of 10-15, with a genre distribution in the favor of the male one, with predominant location on the tibia (10 cases) and minimum invasive treatmnet application for an increased number of cases.

MINNIMALLY INVASIVE PROCEDURE FOR VUR

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Introduction: Vesico-ureteral reflux is an abnormal, retrograde flow from the bladder to the superior urinary tract, and it is diagnosed in infants and children. It is often associated with urinary tract infection. The treatment can be surgical or noninvasive. **Objective:** The goal of this study is to compare the minimal invasive procedure with the classical approach, regarding hospitalization, post-op

complications, and cost-effective. Material and methods: This is a retrograde study on a lot of 17 patients admitted in the Pediatric Surgery Clinic Timisoara, between 2015 and 2017. 4 patients benefited minimal invasive treatment, (cystoscopy with Vantris injection), 4 underwent classical surgery, and 11 of them had noninvasive treatment. Results: The number of hospital care, operating length, and Intensive Care Unit admittance was significantly lower for the patients who underwent minimal invasive surgery compared to those who had classical surgery, the average being 4 days of hospital care, 1.5 hours on the operating table, and 0 ICU care, compared with 7.22 days, 2.1 operating hours and 4.6 days in ICU for the classical procedure. Discussions: The most frequent post-op complications were urinary tract infections (13 cases, most common germ was E.Coli), dysuria (7 cases), post-op hematuria (5 cases). Conclusion: The minimal invasive procedure drastically reduces hospice care, post-op complications, and is more cost-effective compared with the classical approach, patients not needing ICU admittance.

MEDICAL AND SURGICAL APPROACH IN CHILDREN WITH NEUROBLASTOMA-A RETROSPECTIVE STUDY

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Introduction: Neuroblastoma (NB), the most common cancer of the infant, derived from neural or adrenal structures, can be located or metastatic and represents the third malignancy in the child. The multidisciplinary approach of the last decades has led to the improvement of life expectancy in this disorder. Objectives: We have proposed a retrospective analysis for a period of 10 years between 2006 and 2016 of cases of NB admitted in Clinic III Pediatrics to follow the clinical-progressive aspects and the need to approach the multidisciplinary team. Material and Method: The study group consisted of 32 cases, aged between 2 months and 17 years with a gender distribution of 62% boys / 38% girls, which accounted for 59.3% of rural / 40.7% of urban, of TM 25%, 21% AR, 15.6% CS, BH, 6.25%, HD 9.37% and 21.8% other counties. The lot was analyzed on clinical and laboratory criteria that allowed for diagnosis and staging to choose the therapeutic alternative. Average, percent, student test, and Kaplar-Meier survival curve were calculated. Results: The analysis of the study shows that NB was diagnosed: 1 year at 18.7%; in 37.5% between 1-3 years; in 25% between 3-6 years; and 18.7% > 6 years. The placement of NB was : 62% abdominal; mediastinal / intrathecal 22%; pelvic *% and *% other localizations. In terms of staging: 3,2% stage I; 12,5% stage II; 12.5%; stage III; 68.7% stage IV; 3.12% stage Ivs. Metastases were present in: 50% of abdominal NB; 25% intrathecal NB and 50% in paravertebral NB. Histologically 87.5% were Neuroblastoma , 10% Ganglioneuroblastoma and 3.1% Vipoma. Surgery intervened at 93.47% by location, even if it was not completely resectable at the onset of diagnosis; and in advanced inoperable stages we had 6.2%. AVM / 24 hours <100 was in 66% of cases, 100-500 to 25%; and > 500 9% of the cases Feritin level <100 md / dl to 25%; 100-500 to 40.6%, 500 to 34.4%. The favorable post-intervention outcome was 97.3% and post-first-year chemotherapy 75% of the cases survived. In the first year there were 8 deaths (25 %) in the follow-up year 4 12.5% recidivists and a total of 14 deaths 43.75%. In two cases, bone marrow transplantation chemotherapy was augmented. Conclusion: NB in our study was diagnosed in the advanced stage of ST IV disease 68.7% of the cases and the overall survival was 56.25% which implies an improvement of diagnosis and multidisciplinary intervention

THE IMPORTANCE OF TEAM WORK BETWEEN PEDIATRIC GASTROENTEROLOGIST, RADIOLOGIST, PATHOLOGIST AND SURGEON IN A CASE WITH CHRONIC SECRETORY DIARRHEA

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Chronic diarrhea in infants is a common condition for addressability to pediatric gastroenterologists. The causes are multiple and the delay in reaching the final diagnosis can lead to complications. Vipomas are neuroendocrine tumors that autonomously secrete vasoactive intestinal peptide (VIP). Watery diarrhea, hypokalemia and achlorhydria (wdha) is associated with vip-secreting neurogenic tumors involving the retroperitoneum or mediastinum in children. the aim of this work was to present the clinical and histo-genetic aspects of this rare entity. the authors present an infant with chronic diarrhea, hypokalemia and metabolic acidosis secondary to a vipoma in the retroperitoneum. Laboratory findings showed excessive production of vip. after surgical resection of the tumor, diarrhea subsided. immunohistochemical examination confirmed the diagnosis of n-myc negative ganglioneuroblastoma. Conclusions: The physicians should be aware that there are some rare tumoral causes of chronic diarrhea, often under-diagnosed. if the diagnosis is not considered, extensive gastrointestinal investigations will be undertaken, delaying the diagnosis and avoidable morbidity may occur.

INFECTIOUS COMPLICATIONS OF VENTRICULO-PERITONEAL DRAINAGE SYSTEMS IN CHILDREN WITH HYDROCEPHALUS

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Background: Ventriculoperitoneal (VP) shunts are used for intracranial pressure management and temporary cerebrospinal fluid (CSF) drainage. Infection of the central nervous system (CNS) is a major cause of morbidity and mortality in patients with CSF shunts. Devices predispose to infection by damaging or invading epithelial and mucosal barriers to infection, by supporting growth of microorganisms and thus serving as reservoirs, by impeding host defense mechanisms, and, when contaminated, by directly infecting patients. The aim of the present study was to evaluate the clinical features, pathogens, and outcomes of 18 patients with CSF shunt infections collected over 2 years. Infection from a shunt may produce symptoms such as a low-grade fever, soreness of the neck or shoulder muscles, and redness or tenderness along the shunt tract. The incidence of CSF infection secondary to ventriculostomy, shunt insertions has been quoted in previous reports as being between 2.2% and 39 %. Many factors have been reported to be associated with increased risk of infection,

including the age of patient, etiology of hydrocephalus, the type of shunt implanted, and the surgeon's experience. Methods: The patients with shunt insertions were evaluated using; age, sex, etiology of hydrocephalus, shunt infection numbers, biochemical and microbiological parameters, prognosis, clinical infection features and clinical outcome. Results: The most common causes of the etiology of hydrocephalus in shunt infected patients were congenital hydrocephalus-myelomeningocele (32%) and meningitis (23%). The commonest causative microorganism identified was *Staphylococcus (S.) aureus*, followed by *Acinetobacter spp.*, and *S. epidermidis*. Conclusion: In a case of a shunt infection the timely usage of appropriate antibiotics, according to the antimicrobial susceptibility testing, and the removal of the shunt apparatus is essential for successful treatment.

A SCORE SYSTEM IN ACUTE APPENDICITIS IN CHILDREN

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Introduction: Although it is the most common surgical condition of the child, early diagnosis of acute appendicitis in children often remains difficult. Considering the polymorphic symptoms of acute appendicitis, various scoring systems have been imagined that have attempted to improve the diagnostic rate. By far the most well-known and most valued in various studies are those developed by Alvarado (MANTRELS score) and Samuels (PAS). The current study attempts to validate appendicitis scores in children aged 4-18 years in a polyvalent emergency service, the County Emergency Hospital in Piatra-Neamt. **Material and methods:** The study was conducted on two series of pediatric patients hospitalized consecutively with the diagnosis of acute appendicitis in both the Department of General Surgery and of Pediatric Surgery of the County Emergency Hospital in Piatra-Neamt, in between 01.01.2009-31.12.2014. The collected data was processed using Microsoft Excel and IBM SPSS v 14 and Medcalc v 14. **Results:** The ROC curve was analysed, with statistically significant difference ($p < 0.0001$) and a CI of 95%. For the Alvarado score the surface area was of 0.805 (0.783-0.826), and for the Samuel score of 0.887 (0.869 - 0.903). **Conclusions:** Both scores (Alvarado and Samuel) are useful in the early diagnosis of acute appendicitis in children. They reduce the need for imagistic investigations and decrease the rate of negative appendectomies, thus reducing unjustified consumption of materials. The Samuel score has better results over the Alvarado score when applied to a pediatric population.

CARDIAC WOUNDS AND THE MANAGEMENT ROLE OF THE THORACIC SURGEON

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Introduction: A great part of a thoracic surgeon's emergency activity is marked by thoracic trauma, the vast majority of cases having other associated traumatic components. A percentage of these severe traumas are represented by cardiac wounds. The purpose of this paper is to identify the role of the thoracic surgeon in the management of cardiac wounds. **Material and Methods:** We conducted a retrospective study between 2005 and 2017, identifying a number of 5 cases of thoracic trauma involving the heart, with a mean age of 36.8 years, 80% being male patients. The same percentage is due to aggression. All cases had hemothorax associated; only 3 cases had hemopericardium. In all cases we

performed exploratory thoracotomy; one patient needed a laparotomy to control the bleeding. We identified 3 RV wounds, out of which 2 didn't have full myocardial penetration, a RA wound with complete IVC sectioning, and a posterior RV wound. Results: The mortality rate was 40%, the recorded deaths were intraoperative. A patient developed cardiac arrest consecutive to arrhythmias, internal cardiac massage was necessary. Two cases required myocardial suture using pericardial patch. A patient benefitted by an intercostal flap for plompage. ICU stay was 4.23 days; overall in-hospital stay was 8.53 days. Conclusions: Cardiac wounds are severe, with a very elevated mortality rate. Most cases have hemothorax associated, for which, if they survive primary care, are routed to the thoracic surgeon, who is forced to surgically intervene, even if his experience in treating myocardial wounds is limited by the small number of cases. Romanian thoracic surgical units do not benefit from extracorporeal circulation, which in term leads to high mortality. The survivors require top quality cardiac follow-ups, to avoid unavoidable complications.

REHABILITATION FROM ADOLESCENCE TO EARLY ADULTHOOD OF A POLYTRAUMATIZEDPATIENT-CASE REPORT

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Introduction.Orthopaedic injuries are major determinants of long-term outcomes in multiply injured patients. The objective of our case report is to present the follow-up of a polytraumatized adolescent with multiple fractures through his early adulthood. **Material and method.**We present the case of a 20-year old male patient who suffered a car accident five years ago. He suffered multiple fractures (left femur, left ankle and rib fractures) and internal organ injuries. He needed a splenectomy and was in come for one week. He required external fixation of the open left femoral shaft fracture and casting of the ankle fracture. The patient started the rehabilitation in the inpatient department after orthopaedic healing of the fractures. He needed a long-term rehabilitation in order to regain the mobility of left lower limb joints, muscle strengthening, gait regaining and gait training, and cardiopulmonary training. **Results.**The patient has now a good overall functioning. He has a slight lower limb inequality, with a limitation of the left knee range of motion and a left genu varum deformity. The patient also complains of low back pain and a reduced functional capacity. He continues the physical therapy in the outpatient Rehabilitation department and practices a daily home-based exercise programme. He is going to have a MRI for the left knee complaints in order to detect the possible cartilage lesions. **Conclusions.**Long-term rehabilitation is one the objectives in the management of a paediatric patient who has suffered a polytrauma with multiple fractures. Although the patient is no longer a child his supervision by the rehabilitation specialist should continue in the adulthood. This recommendation will make possible the early diagnose and the treatment of secondary musculoskeletal complications.

SEROUS PAPILLARY CYSTADENOCARCINOMA IN A 17 YEARS OLD GIRL: CASE REPORT

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Introduction: Ovarian cancer continues to be an extremely lethal cancer, worldwide ranked second place as mortality rates, after breast cancer. There are lots of discussions about screening efficacy, so that this type of cancer would be possible to detect in very early stages. A detection of this condition while still in an incipient phase will lead to the beginning of a radical and complex treatment protocol which increases global survival rates. There are different types of tests that allow an early detection of this type of cancer: genetic tests (BRCA 1 and BRCA 2 as women suffering of these mutations having a chance of 30%-40% to develop ovarian cancer), imagistical and serological examinations, CA125-marker being absolutely related to this pathology and volume of the tumor. The marker has normal values of 35 U/l or less. Values between 35U/l and 200 U/l can suggest a diagnosis of pelvic endometriosis, but do not exclude that of ovarian carcinom. Values up to 500 U/l often suggest the possibility of treating with optimal cytoreduction procedures, and finally, values higher than 500U/l indicate the need to start treatment with neoadjuvant chemotherapy treatment and an optimal interval cytoreduction. Unfortunately, no preoperative investigation can clarify the diagnosis as the final histopathological result of paraffin block examination is needed in order to start the oncologic treatment. The value of CA125 marker is also very useful along with the imagery, for monitoring patients on a long term basis, after stopping the oncological and surgical complex treatment. Case report: a patient aged 17, was admitted to 2nd Paediatric Clinic, Cluj Napoca, diagnosed with bilateral ovarian tumor, peritoneal carcinomatosis with ascites. The pathology started about one month before she presented to the doctor, showing signs of increase in abdominal volume and unsystematic diffuse abdominal pain, lumbar pain and loss of appetite. The ultrasound examination conducted in the Paediatric Clinic suggested an aspect of ovarian cancer with peritoneal carcinomatosis with ascites. C.T. tests seem to describe the same bilateral ovarian tumor, massive ascites, and also some celio-mesenteric and retroperitoneallymphadenopathy, some nodes being more than 1 cm long. The serological examinations, more precisely the CA125 marker had a value of 973,2 U/l. From the beginning, all evidence suggested a malignant tumor in an advanced phase. Check-up at hospital admission: altered general mood, no fever, IZ=2, relaxed abdomen with increased volume, no palpation pain, normal intestinal transit, presence of hydroaeric noises, normal liver size, no other physical changes. The patient does not have a family history of malignant pathology. The decision was made to start the surgical intervention. After laparotomy and the subtraction of 4 l ascites fluid with yellow-translucent aspect, we could observe both of the annexes transformed by tumor – cauliflower aspect and extremely friable lesions. There is peritoneal carcinomatosis at the bottom of the pre- and retrouterine sac and as well as the dome of the bladder. The distal end of the greater omentum adheres to the tumors. There is evidence of pelvic, lombo-aortic and mesenteric adenomegaly with unclear aspect. The extemporaneous biopsy could not discern between a borderline and a malignant lesion, the result having to be confirmed after the inclusion in paraffin. But the decision of optimal cytoreduction procedures is taken based on the aspect of the intraoperative lesions, the cytology of the ascites fluid (malignant cells) and the high value of the CA125 marker. The patient will have to go through total hysterectomy with bilateral annexectomy.

together with total removal of the pelvic peritoneum, a fragment of the dome of the bladder and the rectosigmoidian junction, with rehabilitation of intestinal continuity and full recovery of the bladder. This has been continued with lymphadenectomies of the iliac, bilateral external and obturator nodes, interaortocaval nodes biopsy, and the resection of the greater omentum at the gastric curvatures. At the end of the intervention, no abdominal macroscopic tumor was still present, so did not remain any microscopic tumor, so the resection was R0 type. Postoperative evolution was favorable with the resumption of gas transit in the third day after surgery. The final histopathological result from paraffin block is serous papillary cystadenocarcinoma with high bilateral ovarian malignancy pT3c, N0, Mx. This result, along with the rest of clinical and paraclinical information helps us to place the case within stage III C. The gynecology committee of IOCN recommends ongoing oncologic treatment with 6 chemotherapy sessions according to the standard protocol: Paclitaxel 175mg/m² + carboplatin AUC 5, sessions every 21 days and substitutive hormonal treatment. Discussion: We would like to start a discussion about a reality which is still unfavorable. There is no efficient screening test for detection of ovarian cancer. Indeed, both childbirth and oral birth control pills reduce the risk of developing ovarian cancer, but both methods cannot be applied to infant population. The safest surgical prophylactic method, bilateral annexectomy, can be taken into account for considered for women over 35 years, who do not wish to procreate anymore, but is totally unacceptable to the infantile population. Due to these aspects, and considering the fact that almost 10% of cases are hereditary, we need to focus on methods which can help diagnose and treat these pathologies. Fortunately, this only represents 1% of childhood and adolescence developed cancers. A very detailed anamnesis is a very important part of clarifying the diagnosis. This will include information about patient's sexual life, birth control pills consumption, miscarriages or number of births, regularity and abundance of periods. It is important to establish the familial oncological load, and to insist on the ovarian and breast malignant pathology. Also important to be noted is the significant loss of weight over a short time span. Vaginal touch is often impossible to perform due to the physiological status of "virgintactum" or a sore, painful pathological status. In such circumstances, there is indication for a rectal touch which can offer information about the quantity of abdominal pelvic tumor, the sensitivity or involvement of the rectum or the pouch of Douglas. Of all methods of investigation used for patients accusing for abdominal discomfort, nausea, vomiting, transit disorder, lack of appetite, menometrorrhagia (which in malignant ovarian pathology is more frequent than amenorrhea), I would like to start with the abdominal ultrasound examination with full bladder. It is a common investigation which can be performed in emergency, is cheap and easy to be done by fully qualified staff. There is no need for a preparation prior to the investigation but it offers data about the possible volume of tumor, its structure and vascularization which can already indicate the diagnosis. Also, abdominal ultrasound examination can highlight the presence or absence of ascites, the state of the liver and the presence of possible tumors at its level, and even about the status of the lymph nodes. Most of the times in paediatric surgery, ultrasound examination is considered to be "the diagnostic key".

ACUTE NECROTIC DESCENDENT MEDIASTINITIS – SLOW RECOVERY, COMPLICATED BY CERVICAL DEFECT, SUPERIOR APERTURE DEFECT AND CHRONIC PNEUMOTHORAX

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Introduction: Acute necrotic descendent mediastinitis (DNM) with odontogenic source is unfortunately very frequent in our country, due to poor oral hygiene. It has a high mortality, and the patients who survive it have a high, difficult to treat complication rate. **Material and Method:** We present the case of a 24 year old female patient admitted with DNM, secondary to a left submandibular abscess, diagnosed 10 days prior to presentation. The CT scan showed the submandibular collection, anteriorly fused into the mediastinum, pericardium and both pleural spaces. A gonion to gonion cervicotomy was performed, with opening of the left lateral pharyngeal, left submandibular, left and right submandibular, left supra-omo-hyoidian spaces, with extraction of the left molars, right pleural drainage. Then a left thoracotomy was performed, with anterior and posterior mediastinotomy, pleuro-pericardial fenestration, pleural drainage and ascendansubxyphoidian mediastinal drainage. Wide spectrum antibiotherapy and antifungal therapy was administrated. Oro-tracheal intubation was maintained for 7 days. Daily dressings and repeated lavage was performed. **Results:** The postop. recovery was slow, the patient needed prolonged intubation. The right chest drain was removed on day 10 postop. The mediastinal drain was removed after 8 days. Due to cervical infection, colonization with *Pseudomonas A.*, the patient developed a wide cervical cutaneous defect, which communicated with the superior mediastinum and the left pleural space, leading to maintenance of a chronic left pneumothorax. We performed sealing of the fistula with separate non resorbable stiches, but the persistence of the pneumothorax required a thoracoscopy for deloculation, suture of the superior mediastinal pleura and repositioning of the chest drains. We obtained complete lung re-expansion. The cervical defect was covered with local skin flap after prior appliance of skin expanders. Hospital stay was 50 days, of which 15 were spent in ICU. **Conclusions:** Odontogenic DNM still remains difficult to manage. The presence of a multidisciplinary team composed by thoracic, maxillary and facial surgeons, a plastician and an anesthetist is the key of success for these cases. Young age and the lack of comorbidity is an advantage for survival. To prevent this pathology a thorough dental screening for infections is mandatory.

THE ROLE OF THORACOSCOPY IN THE DIAGNOSIS AND STAGING OF THE MEDIASTINUM

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Introduction: The mediastinal pathology represents an important segment of thoracic surgery. This paper's purpose is to assess the role of thoracoscopy in setting the diagnosis for this type of pathology, given the fact that most of the national thoracic surgery units have no possibility to perform mediastinoscopy. **Material and method:** We analyzed retrospectively 336 patients admitted to our unit on a 16 year period, having mediastinal pathology, with or without metastases. We excluded the cases with detectable primary lung tumors, taking into account only lymph node metastases of unknown origin. Mean age was 44, with a male to female ratio of 1.47. 64 uniportal thoracoscopies were performed, 12 by biportal approach and 257 by video assisted mini-thoracotomy. **Results:** Diagnostic thoracoscopy was performed successfully, only 14.58% of cases required conversion to open techniques. Recorded mortality was 0.29% - 1 case. We obtained clear pathological result in 84.2% of the cases. Part of the patients benefitted from surgery with curative intent – 6.54%. Mean hospital stay was 3.27 days. **Conclusions:** Thoracoscopy is a surgical technique worth taken into account for mediastinal lesions, especially if there is no mediastinoscopy possible. It has, along the known ones, the advantages of magnification, offering a good exposure of the mediastinum, and allows the exploration of the associated lung lesions. In selected cases can have curative intent. It allows the exploration of 7, 8 and 9 nodal

stations compared to mediastinoscopy, having the disadvantage of a limited contralateral mediastinal exploration.

THE VALUE OF ULTRASOUND IN YOUNG CHILDREN WITH URINARY TRACT INFECTION

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Malformations are among the main causes of renal disease in children, affecting 1% of the general population. Urinary tract infection is a common pediatric problem and vesicoureteral reflux is its most common complication. Aim: Assessing the need to perform a renal ultrasound as a screening method for malformations in young children with urinary tract infections. Material and methods: Renal ultrasounds were performed on 179 patients with urinary tract infections hospitalized during April 2016 – September 2017. The patients were aged between 0.4 months – 10 years, with an average of 3 years \pm 2.8 months. Of these, 109 patients (60.9%) had a normal renal ultrasound report. Results: The most common finding was congenital hydronephrosis: grade I–II (38 patients – 63.3%), grade III–IV (9 patients – 15%) and grade V (4 patients – 6.6%). As causes of hydronephrosis, ureteropelvic junction (UPJ) obstruction was found in 23 patients (45%), vesicoureteral reflux (VUR) in 10 patients (19.6%) and obstructive megaureter in 4 patients (7.8%). Other malformations included 3 cases of renal cystic dysplasia, 4 cases of duplicated collecting system and 2 cases of unilateral renal agenesis. Discussions: Cases of low grade hydronephrosis were monitored by ultrasound; patients with history of more than 2 infections underwent cystography/voiding urosonography (5 versus 13 cases); 10 patients benefited from superior imaging, which confirmed ultrasound findings in all cases; 12 patients (25%) required surgery. Conclusions: Renal ultrasound is useful in order to establish a complete diagnosis and subsequent monitoring of these cases. Voiding urosonography is a reliable, sensitive, safe and radiation-free method of investigation of vesicoureteric reflux in children. Key words: urinary malformations, voiding urosonography, vesicoureteral reflux

THE ROLE OF THE MINOR BIRTH TRAUMA IN THE CLINICAL BIOLOGICAL EVOLUTION OF THE TERM NEWBORN

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Introduction: Minor birth trauma represent an important risk factor in neonatal morbidity. The incidence of birth trauma decreased due to improvements in birth care and perinatal diagnosis. Objectives: Authors aim to evaluate the effects of birth trauma on clinical-biological immediate evolution of newborn. Material and method: The study was carried out in the Premature Neonatology Department of Emergency Clinical Hospital for Children „L.Turcanu” and it followed the clinical-biological evolution of newborn and also the total hospitalization period, comparatively at two groups of newborn

with and without birth trauma. Results: At the studied group the most frequent types of birth trauma were: soft tissues lesions – bruises, petechiae; at the level of cephalic extremities - caput succedaneums, cephalohematoma; clavicle fracture and brachial plexus injury. The hospitalization period was longer at the group with minor birth trauma, also the incidence and intensity of jaundice were higher. Neurological morbidity was higher in the group of newborn with birth trauma. Conclusions: Minor birth trauma represent an important risk factor in clinical-biological evolution of newborn and in the length of hospitalization period of this category of newborn.

RECURRENT ORCHITIS IN INFANCY - AN EXCEPTIONAL ENTITY

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Introduction Acute scrotum is an emergency with the main goal to differentiate testicular torsion from other conditions. Orchitis is one of the most frequent reasons children present to the emergency room for testicular pain and most of the time the condition doesn't reappear. Recurrent orchitis in prepubertal boys is a rare encounter and it should be evaluated thoroughly since it could reveal underlying congenital malformations. **Material And Method** We present the case of a 2 year old patient who had recurrent orchitis as a consequence of Zinner Syndrome, an extremely rare condition reported in children. **Results** Pelvic US performed after the second episode of orchitis revealed a cystic mass posterior and inferior to the bladder and left renal agenesis. MRI was performed and a dilated left ejaculatory duct cyst was noticed. Open surgical excision was done and diagnosis was confirmed by histopathological exam. **Conclusions** Urogenital malformations are uncommon etiologies for orchitis and they demand an accurate approach. Cysts of the ejaculatory system are exceptional situations and surgery in children should be attentive since fertility or urinary continence can be affected. Workup should be performed in any child after the second episode of orchitis.

THE MANAGEMENT OF NEWBORN WITH MULTIPLE MALFORMATIONS. REVIEW OF THE LITERATURE AND CASE PRESENTATION

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Introduction. The newborn with multiple malformations is a permanent challenge for every neo-natal surgical team. The continuous development of prenatal diagnosis techniques, especially of ultrasound, determined early schedule of surgical interventions and timing. **Material and methods.** The authors are reviewing the literature regarding the cases with multiple malformations and they are presenting the case of a newborn with: esophageal atresia with TEF, right aortic arch, duodenal stenosis due to ring pancreas, intestinal malrotation, ano-rectal malformation, horseshoe kidney and left undescended testis.

Birth weight was 2350 g, age of gestation 35 weeks and ultrasound and MRI prenatal diagnosis of right aortic arch, duodenal stenosis and horseshoe kidney. Results. In the second day after birth, after CT scan confirmation of the right aortic arch, the newborn was taken to the operating room for esophageal atresia, through left thoracotomy. Before EA repair, an open gastrostomy was performed. In the 6th day after birth a "diamond shape" duodenal-duodenal anastomosis was performed and a left colostomy. Discharge at 17 days after birth. Conclusions. Prenatal diagnosis of multiple malformations is determining an extended clinical and radiological exploration plan of the newborn. The literature is showing that there are increased chances to determine other anomalies. Is a big challenge for the surgeon and anesthesiologist to elaborate the timing for all surgical interventions.

RECURRENT ABDOMINAL PAIN - A PROBLEM OF DIAGNOSIS AND TREATMENT

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Introduction. Abdominal pain is a frequent cause of medical appointments, being a non-specific symptom, suggestive of a range of organic and functional disorders. Chronic abdominal pain is defined as abdominal pain lasting over 3 months, either continuously or intermittently. Intermittent pain can be defined as recurrent abdominal pain. **Case presentation.** L.G., a 4 year old male patient from the rural area is admitted to the 1st Pediatric Clinic for unsystematized periumbilical and epigastric abdominal pain, intermittently accompanied by nausea and vomiting, loss of appetite, pale skin, periorbital "dark circles" and suffering facies. The personal history indicates that the patient was born at term, AGA (GA = 40 weeks, BW = 3000g). Disease history reveals that the first symptoms occurred in September 2015. At the time of onset, the mother brought the patient at the territorial hospital where the usual biological investigations were performed. Treatment for parasites and anemia was initiated. The symptoms do not succumb completely to the prescribed treatment, the abdominal pain is intermittent, for which reason the patient is repeatedly admitted to the territorial hospital. In March, the patient is referred to the "Louis Turcanu" Children's Clinical and Emergency Hospital - First Pediatric Clinic, Timisoara, for investigations and specialized treatment. The persistence of intense pain imposed complex investigations. The abdominal MRI identified a intestinal cystic. The patient is transferred to the Surgical Department where exploratory laparoscopy, supraumbilical laparotomy and the excision of the cystic formation are performed. Microscopic examination of the inverted finger glove formation reveals the presence of gastric and pancreatic tissue at this level - Meckel diverticulum. **Conclusions.** 1. Meckel diverticulum is the most common congenital intestinal anomaly (2-4% of the population). 2. Meckel diverticulum is an embryonic vestige that is sometimes observed in the adult as an inverted finger glove formation 3. Frequently, this anomaly is discovered by chance or intraoperatively. 4. Diagnosis is difficult to establish as it presents as unsystematized abdominal pain, diverticulitis and bleeding. Sometimes a periumbilical tumoral mass or morphological anomalies in the navel suggest the existence of the Meckel diverticulum.

PERCUTANEOUS ALCOHOLIZATION IN A HEPATIC HYDATID CYST

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The hepatic hydatid cyst (HHC) is a parasitic disease and its etiology is mainly the *Taenia Echinococcus granulosus*, which is frequently met on Romanian territory. The disease is mostly located in the liver (60%) and lungs (30%). Apart from the pharmacological treatment with Albendazole, the only treatment that can actually eradicate the hydatid cyst is the surgical one (minimal invasive or classicaly). The reason to this presentation is to describe the first case of HHC treated at the "Spitalul Clinic de Urgență pentru Copii Louis Țucarnu din Timișoara" with the ultrasound percutaneous alcoholisation using the PAIR method (Puncture, Aspiration, Injection, Re-Aspiration). In this paper we are presenting the case of a 14 years old patient that has been diagnosed with HHC located in the liver – segments VI and VII that has been treated using the PAIR method and had a good evolution.

**SYMPOSIUM ON SURGICAL MANAGEMENT OF
THE CLEFT LIP AND PALATE WITH
INTERNATIONAL PARTICIPATION**

EVIDENCE BASED MORPHOFUNCTIONAL REPAIR OF CLEFT LIP AND PALATE. MY RECOMMENDATIONS

Gosla Reddy

No single technique of cleft lip and palate repair is a panacea for all cases. Individual clefts need to be managed with an eclectic philosophy, incorporating ideas from several methods that can be adapted in a flexible manner by the experienced surgeon to fit a particular need. Over the years we tried looking at ways to try finding a method that could address key areas in the repair of unilateral cleft lip and palate defects with a single technique. We first started by studying the morphology of the cleft defect. We developed a classification system for grouping most cleft defects. We believe that form will always follow function. The functional deficiencies of the unilateral cleft defect were addressed using a morphological base. This base included the use of septoplasty, muscle repair and mucosal bridges to correct cleft lips and using optimal muscle dissection to correct cleft palates. We have also used a variety of studies including 2 and 3-dimensional photogrammetry, intraoperative vascular anatomy, nasometry and perceptual speech ratings to validate the results of the technique we have developed. In this presentation I will discuss the morphological classification of unilateral clefts, the surgical technique developed by our department to treat primary and secondary cleft lip and palate defects.

CHALLENGES IN PEDIATRIC ORAL SURGERY

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Oral surgery represents a particular chapter in pediatrics. Some of the medical conditions requiring surgery of the oral structures are quite challenging and choosing the treatment strategy is not always easy. In the last 8 years we encountered 9 such cases: one case of tongue duplication, one of giant lingual hemangiopericitoma, a case of severe hypoplasia of entire oral structures, two cases of Neumann's tumor, two cases of holoprocencephaly and two cases of syngnathia. The paper retrospectively details the challenges encountered, the treatment followed and the outcome.

IMPROVING CLEFT CARE IN ROMANIA THROUGH EUROPEAN PROJECTS

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Cleft care in Romania encountered significant steps forward in the last decade. An important dimension of this improvement is related to our constant involvement in several European projects. As a continuance to our efforts of being a part of the process of building an European network of cleft professionals, now we are involved in a new COST Project – „European Cleft and Craniofacial Initiative for Equality in Care”. Also, this year we initiated, together with several other European partners, another two projects under Erasmus+ Programme: “Early care training programme for health care professionals working with children born with orofacial clefts and/or craniofacial conditions” and „Cutting Edge

Training: Optimising medical outcomes for patients undergoing appearance altering procedures via innovative training of health care professionals”. From this perspective we expect to contribute to a significant cleft management improvement in our country.

SURGICAL MANAGEMENT OF CLEFT PALATE CLOSURE OF THE HARD PALATE CLEFT IN A SECOND STAGE

MY Mommaerts, MD, DMD, PhD, FEBOMFS, FICS, FAACS

Four concepts will be presented (pairing of the edges, pairing of the edges and lateral relaxation incision at the transition with the soft palate, a transposition flap of the greater segment in unilateral clefts and bilateral transposition flaps in bilateral clefts. Each time a triangular flip-flip-flap of the oral mucosa is rotated into the nasal floor defect. Collagen fleece and fibrin glue help to cope with the Bernouilli effect. Fistula rate is 5% (compared to 14,3% Sommerlad technique. The presenter will elucidate on the indications and techniques.

REALISTIC EXPECTATIONS IN COMPLEX SEVERE SECONDARY CASES OF CLEFT LIP AND PALATE

E. Paraschivescu

Key words: cleft lip and palate, secondary deformities, aesthetic s and function, psychological status, DAS scale, regional centers. The cleft lip and palate pathology raises two major problems, which can impact on a long term the patients’ life, aesthetics and function. A good repair should respect the both of these requirements and that is in direct and close relation to timing, the right procedure in the right hands, multidisciplinary approach and proper follow up. The aim of our paper is to try to define a limit for the surgical treatment addressed to the complex secondary cleft lip and palate cases. It is absolutely necessary to know when to stop, at what point one more surgery could ruin a fairly good result. A very important element that is neglected quite often is the psychological status of our patients. The strip between hope and disappointment, trust and lack of confidence, enthusiasm and depression, involvement and resignation can be very thin sometime, in these patients. We conducted a study on 50 cleft patients, with secondary deformities of different degrees of complexity, in an attempt to establish a connection between the degrees of the deformity, number of surgeries and patients’ expectation. For the psychological evaluation we used the DAS scale (depression, anxiety and stress). A large number of clinical cases will be presented, just to give consistency to the conclusions of our study. Amidst these, one could emphasize the following: A first very good functional and aesthetical result is always favorable to a good further development of the anatomical structures involved by cleft and of the functions as well. Better than before should never be part of our philosophy. Honesty is of major importance, if we want to build a relationship based on trust and respect with our patients. Do not sell illusions! Not always surgery is the solution. Regional centers, with well-trained people are the right way to give these patients the chance to a normal life. Safari surgery can never bet the solution!

LATE ONSET NASOALVEOLAR MOLDING – IS IT EVENTUALLY WORTH IT?

Vikram Shetty

Aim: To assess the long-term results of Nasoalveolar Molding in patients who presented to the hospital after 6 months and compare them with those who underwent the procedure within 6 months of age. **Rationale:** Many patients present late for treatment. We get good scars even with older children. And hence we decided that we had nothing to lose. **Materials and Methods:** GROUP I – NAM started before 1 month of age – 50 patients. NAM carried out till 6 months of age and the patients recalled every 3 weeks. GROUP II – NAM started between 1 - 6 months of age – 50 patients. NAM carried out for a minimum of 3 months and patients recalled every 2 weeks. GROUP III – NAM started between 6 - 12 months of age – 50 patients. NAM carried out for a minimum of 3 months, till a maximum of 15 months and the patients recalled every 2 weeks. **Discussion:** A significant reduction in intersegment distance was noted following NAM in all the groups. However the Decrease in Group I > Group II & III. No unfavourable effect of NAM on the growth of maxillary arch was noted. A comparison of the changes in between Group I, II & III revealed that statistically no significant difference was present with respect to change in horizontal parameters. (T1 – T3). However, with respect vertical parameters, statistically significant changes were observed in between group I and group II & III but no significant difference in between group II and group III. In general the overall increase was significant. **Conclusion:** Although the results of Group I were superior to those of Group II & III, significant effects of NAM on nasal and alveolar morphology were also evident in Group II & III. No significant difference was noted in between Group II & III with respect to majority of the parameters both after NAM and at 18 months of age. The cosmesis of the lip repair with regard to surface texture and quality of the scar in patients for whom cheiloplasty was carried out at as late as 15 months was comparable to the cosmesis in patients where cheiloplasty was carried out at 6 months of age. However patient compliance was extremely difficult and only the most motivated parents were included in the study. The 2 weekly interval recall takes a toll on the toughest of parents and many man-hours are spent in counseling and feedback.

ELECTRONIC MEDICAL RECORD FOR FACIAL ANOMALIES (EMRFA) IN BULGARIA

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An original software platform and a national network for trusted specialists have been developed by the Cleft and Craniofacial Center in Plovdiv, Bulgaria thanks to the support of the nongovernmental association for facial anomalies ALA (www.ALA-BG.org). The EMRFA gives the possibility for communication between the Center, the specialists, the parents-patients in real time and allows them to keep the information safe in servers with backups. In 2017, more than 900 patients and 65 specialists (plastic, maxillofacial, ENT or pediatric surgeons, ophthalmologists, neurosurgeons, speech therapists, orthodontists, feeding specialists, psychologists) from different geographical regions are included in the EMRFA. There is a free access to EMRFA for a dynamic epidemiology and statistics. High level of protection of personal data is ensured and ALA has the governmental authorization to administrate personal data files. The patient-parent sign a voluntary consent form for participation in the EMRFA. The parent-patient specifies which specialists from the network can have access to their personal data files. The patient and his family are in charge of their own personal data and can write comments as text, upload pictures and videos to their files. Participating in EMRFA is not mandatory but patients who

disagree to participate are considered at risk for poor follow up (out of sight). In case of agreement which is 99% for 900 patients the information is accessible by all members of the Center and only by the authorized specialists chosen actively by the parents-patient. In the secured part of the platform the information is presented in chronological “posts” on the “wall” of the patient’s file, in the section “files” - as a brief description of the events by dates and as a collection of all the uploaded pictures - in the section “gallery”. Only the surgeons from the Center are authorized to define and write the main (and secondary) clinical (s) diagnose(s). The system provides the possibility for one or more diagnoses for the same patient according to the ICD-11. An additional coding for sub phenotypes is proposed for cleft lip and or palate. For this pathology the standards of documentation proposed by EUROCLEFT is applied. Each specialty has an individual form to describe and code the present state and the therapy for the patient. Individual (for the tasks) and automatic (according to age) electronic reminders are sent to the Center, the concerned specialists and the patients. Depending of some psychosocial risk factors patients are divided in 3 groups – normal, low and high risk. The “out of sight patients” are classified in this group when they have missed their appointments for more than one year. Filters using different criteria gives the opportunity to study different groups of patients according to the diagnose and sub phenotypes, type of defects, type of therapy, age, geographical region, risk groups, name of the specialist, key words, etc. Extension for other pathologies requiring long term follow up is possible as well as an interaction with other electronic medical records. Intercentric and international comparative studies becomes easier with standardized documentation and easy access by Internet. An export of the skeleton of this platform and the construction of national specific requirements is possible. Some clinical examples are presented showing particular details of the surgical protocol for cleft lip and palate applied in Bulgaria in the last 20 years.

PRIMARY PLATOPLASTY

Reha Kişnişci

Ankara University

The goals of the management of cleft palate base on anatomical, functional, growth and development, as well as to certain extend esthetic requirements. The surgical techniques include those may consist layered closures, soft palate lengthening, repair of palatal musculatures, single to staged approaches are name to few components that varies among cleft surgeons. The obvious difficulties for the evaluation of surgical long term comparative outcomes many protocols although narrowed down considerably do exist having several pros and cons. This presentation will attempt to overview the management strategies of cleft palate and discuss the most commonly used techniques based on the authors own experiences over two decades and currently available literature. Clearly there are some advantages and disadvantages of these approaches hence cleft surgeons need to be well prepared to address each unique clinical problem. Also some practical issues that is usually not commonly discussed or overlooked will be explored.

PRIMARY MANAGEMENT OF CLEFT LIP AND PALATE

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Management of Cleft Lip and Palate commence with the prenatal diagnosis of the anomaly if possible and a protocol management from birth to maturity is a prerequisite for a better outcome in terms of dentofacial growth, speech, cosmesis and psychosocial development well being of the affected individual. Primary repairs of the cleft lip and the palate before the age of one, thus, possess an ultimate importance for the consequent treatments and follow ups. In this paper, as a cleft team we will focus on our primary repair approaches mainly from technical point of view and summary our early results. In more than 300 primary cleft patient repairs since June 2012, generally we aim to use nasoalveolar molding in 80% of unilateral cleft lip and palate patients whereas in 95% of bilateral cases. Our lip repair closure average time is 3.5 months. For the palate closure which is single stage repair average time is 8.5 months of age. For the unilateral closure we use Modified Mohler technique along with primary (septo)rhinoplasty. In bilateral cases, Modified Mulliken technique has been used. For palate closure, occasionally anterior palate repair while closing the lip, mostly 2 flap palatoplasty along with radical intravelar veloplasty and extensive muscle dissection (Sommerlad technique). Our fistula rate is 2 % in the last 5 years. Grommet insertion rate is 76% in cleft palate patients. In a group of wide cleft palate patients, acellular dermal matrix has been used successfully. In wide clefts different flap designs of vomer flap is used. For further mobilization of the palatal flaps skeletonization and deep foramen dissection of greater palatine bundle is done with a special design instrument. Very early results for speech outcome is to note 65% of the patients have not developed any degree of VPI. However, 15% of the patients have required any type of pharyngoplasty. Lack of standart speech evaluation of each single cleft palate patient is a weak part of our protocol as usually seen in a developing country. Following the surgery, arm splints are never used, breastfeeding and bottle feeding are allowed. Average hospitalization period is 2 days. Continous antibiotic use for 3-5 days subsided in the last years. Nostril retainer use doomed to disregard due to compliance issues of both baby and the parents. In conclusion, strictly bound to a protocol including surgical techniques and timing, and the same surgeon we consider our early results are compatible with European standarts I terms of cosmesis, dentofacial development and speech outcomes.

MANUSCRIPT REQUIREMENTS

The manuscript must be in English, typed single space, one column on A4 paper, with margins: top – 3 cm, bottom – 2,26 cm, left – 1,5 cm, right – 1,7cm. A 10-point font Times New Roman is required.

The article should be organized in the following format: Title, Names of all authors (first name initial, surname), Names of institutions in which work was done (use the Arabic numerals, superscript), Abstract, Keywords, Text (Introduction, Purpose, Materials and Methods, Results, Discussions and/or Conclusions), References, and first author's correspondence address.