V020 NEEDLE LOSS IN MINIMAL INVASIVE SURGERY IS A REAL CHALLENGE : INNOVATIVE TECHNIQUE FOR RETRIEVAL Mohammed Elifranji, Dr; Santiago Vallasciani, Dr; Bruno Lesile; Abderrahman Elkadhi; Sidra Medicine

Small needles can be detached from the sutures and fly away from the limited laparoscopic vision or hidden between bowel loops that makes its localization and retrieval extremely difficulty even in the hands of best experienced . We demonstrate an innovative technique in retrieving a small suture needle which was lost during Robotic pyeloplasty for a 7 year old child . We used the retrieval device of the magnetic JJ stent which consists of Tiemann-type with 15 Fr diameter and magnet thru one of the working ports and started to scan the abdominal cavity in systemic way under supervision of the laparoscopic camera . This magnetic retrieval device is semi-fixable that does not damage the intra -abdominal organs and has a strong magnetic power that can attach with metallic foreign bodies such needles efficiently.

V021 ROBOTIC GASTROTOMY AND BEZOAR REMOVAL IN A SIX-YEAR-OLD Lior Kopel[1]; Joshua Volin[1]; Anthony Iacco, MD[2]; Begum Akay, MD[2]; Pavan Brahmamdam, MD, MS[2]; [1]Oakland University William Beaumont School of Medicine; [2]Beaumont Health System

Bezoars result from the ingestion of poorly digestible or indigestible substances. A trichobezoar, also known as Rapunzel syndrome, is a type of bezoar that is composed of hair and in most cases, confined to the stomach. Generally, treatment involves endoscopic removal or, if the bezoar is too large, surgical removal via laparotomy or laparoscopy. In this video, we show a 6-year-old patient with a large gastric trichobezoar who underwent robotic gastrotomy and bezoar removal. The robotic platform allowed for excellent visualization, minimally invasive and ergonomic intra-corporeal suturing of the gastrotomy, safe and easy extraction of the bezoar, and rapid recovery for this young child.

V022 ROBOTIC TOTAL EXCISION OF A SPLENIC CYST IN A 16 YEAR-OLD ADOLESCENT Emre Divarci, Associate Professor; Javid Naghiyev, Resident; Ahmet Celik, Professor; Orkan Ergun, Professor; Geylani Ozok, Professor; Ege University Faculty of Medicine, Department of Pediatric Surgery

Total excision of a splenic cyst could be challenging due to the high risk of bleeding during dissection of the floor of the cyst from splenic parenchyma. Therefore, the base of cyst mostly left behind after removal of the roof of the cyst. The recurrence could be seen despite cauterization of the residual cyst cavity. We preferred robotic approach to use the advantages of robotic surgery as ergonomics and better visualization.

In this video, we presented a 16-year-old girl who underwent robotic splenic cyst excision. Total excision including the floor of the cyst from splenic parenchyma was achieved by the technical advantages of robotic surgery. Bipolar robotic forceps was mainly used to control haemostasis. No major complication was encountered during or after operation.

Robotic splenic cyst excision is a safe and efficient surgical option to achieve total excision of cyst from the splenic parenchyma by 3D visualization and ergonomic advantages.

V023 CREATIVE TIPS REPAIRING MALFUNCTIONED PERITONEAL DIALYSIS (PD) CATHETER USING THE LAPAROSCOPIC APPROACH. Amar A Alnaqi, MDMBBCh, FRCSC[1]; Yaqoub Jafar, MD[2]; V Gupta, MD[2]; Esmaeel Taqi, MD, FRCSC[2]; [1]Kuwait University; [2]Ministry Of Health

Purpose: To illustrate a creative tip repairing malfunctioned Peritoneal dialysis (PD) catheter using laparoscopic approach.

Method: We are presenting a 3 year old girl known for bilateral hypoplastic dysplastic kidneys with renal failure. PD catheter was inserted abroad 18 months prior to her referral to our center with PD catheter drainage failure. Laparoscopic exploration revealed peritoneal adhesion and plugged catheter with fibrin tissue. Laparoscopic adhesiolysis completed and the fibrin plug was only possible to be flushed out of the PD catheter by introducing a ureteric stent through it.

Results: The PD catheter is saved and still functioning since then. (18 months)

Conclusion: Laparoscopic assisted approach is a reliable method to diagnose and repair a malfunctioned PD catheter. Cleaning the PD catheter using uretric stent to flush the fibrin plug out was a useful tool when other methods failed and resulted in saving the catheter.

V024 ROBOTIC ASSISTED SWENSON PULL-THROUGH FOR HIRSCHSPRUNG'S DISEASE Emre Divarci, Associate Professor; Denizay Avci, Resident; Hilmican Ulman, Resident; Ahmet Celik, Professor; Orkan Ergun, Professor; Geylani Ozok, Professor; Ege University Faculty of Medicine, Department of Pediatric Surgery

Swenson pull-through has become to be more popular again in the surgical treatment of Hirschsprung's disease(HD) in recent years. The main advantage of this procedure is leaving a very short segment aganglionic colon after surgery. However surgeons had major concerns like damaging adjacent structures during dissection in deep pelvis. We preferred robotic approach to use the advantages of robotic surgery in these fields.

In this video, we presented an 8-year-old boy who underwent robotic assisted Swenson pull-through for a short segment HD. The excellent 3D visualization and the freedom of motion in the deep pelvis by 540-degrees flexibility made dissection of the rectum until the anus easier and safer, while preserving damage from pelvic structures. The postoperative period was uneventful.

Robotic assisted Swenson pull-through is seen as safe and efficient in the surgery of HD. Long term results are necessary to make strong comments about this approach in the future.

V025 LAPAROSCOPIC RECTOSIGMOID COLON RESECTION IN A CASE OF FUNCTIONAL CONSTIPATION RESISTANT TO MEDICAL THERAPY Hilmican Ulman, MD; Emre Divarci, Associate Professor; Ahmet Celik, Professor; Orkan Ergun, Professor; Geylani Ozok, Professor; Ege University Faculty of Medicine Department of Pediatric Surgery

We present the method of laparoscopic rectosigmoid resection using circular stapler for patients with functional constipation.

Six-year-old boy with constipation and fecal incontinence for the last two years resisted a yearlong laxative and enema therapy. Barium enema showed a dilated and severely elongated rectosigmoid colon. Anal manometry was positive for recto-anal inhibitor reflex (RAIR). With an umbilical scope port and 10mm right lower quadrant and 5mm left upper quadrant ports, mid-rectum was transected with a linear endostapler (3,5/60mm) and 30cms of colon was resected extracorporally. Colo-rectal anastomosis was made using a circular stapler inserted anally. The patient was fed on post-op day one and discharged on day four. He is now continent with low dose laxatives.

Patients with functional constipation resistant to medical therapy may necessitate surgical treatment for the elongated and enlarged rectosigmoid colon. Laparoscopic resection provides favorable results in a minimally invasive manner.

V026 ENDOSCOPIC-ASSISTED SALVAGE ANORECTOPLASTY AFTER FAILED PERINEAL FISTULA REPAIR Farah E Doughan, BS[1]; Alex W Rosencrance, BS[1]; Mark B Slidell, MD, MPH[2]; [1]Pritzker School of Medicine, The University of Chicago; [2]Comer Children's Hospital, The University of Chicago Medicine

Purpose: Redo anorectoplasty is associated with worse functional outcomes than successful primary repair. While social continence can be achieved, redo operations may result in injury to the sphincter muscle complex and further scarring of the pelvic floor musculature. This typically leads to inferior outcomes compared to patients without complications from the primary repair.

Methods: We present a novel endoscopic approach to reduce dissection injury and pelvic floor scarring during salvage anorectoplasty after failed PSARP for a perineal fistula. This 7-month-old girl underwent endoscopic-assisted salvage anorectoplasty via her sigmoid mucous fistula to repair a dehiscence and retraction of the initial fistula repair. Endoscopic-guided needle placement and sequential dilation via Seldinger technique successfully recovered the neoanus tract. This was maintained by stent until post-operative dilations were initiated.

Results: She is now a 5-year-old who consistently passes 1-2 bowel movements per day, and occasionally takes laxatives on a prn basis.

V027 SINGLE INCISION LAPAROSCOPIC (SILS) APPENDICOSTOMY CREATION FOR BOWEL MANAGEMENT

Cristine S Velazco, MD, MS; Nelson G Rosen, MD; Aaron P Garrison, MD; Cincinnati Children's Hospital

We present a single incision laparoscopic (SILS) appendicostomy for antegrade enema administration. A “U” incision is made along the inferior portion of the umbilicus and the umbilical stalk is lifted up. Fascia is incised to accommodate a 12mm trocar and the abdomen is insufflated. A 10 mm operating laparoscope is inserted. Using the scope's 5 mm working port the cecum is mobilized bluntly until the appendix easily reaches the umbilicus. The appendix is then exteriorized.

The fascial opening is extended slightly to accommodate the cecum extracorporeally. The remainder of the operation is completed in standard fashion: the cecum is plicated around the appendiceal base and the appendicostomy is sutured to the umbilical skin in a V-Y fashion.

Umbilical SILS appendicostomy is a safe alternative to open or traditional three port laparoscopic approach or cecostomy for improved cosmesis and is an effective way to facilitate antegrade enema administration.

V028 LAPAROSCOPIC MODIFIED SWENSON'S PROCEDURE FOR HIRSCHSPRUNG'S DISEASE: TECHNICAL CONSIDERATIONS AND INITIAL EXPERIENCE Ankur Mandelia, Dr; Yousuf Siddiqui, Dr; Ashwani Mishra, Dr; SGPGIMS, Lucknow, India

We describe our surgical technique and initial experience with laparoscopic modified Swenson's procedure (LmSw), which combines the advantages of laparoscopic rectal mobilization and transanal perineal dissection. 9 children with biopsy-proven Hirschsprung's disease (HD) underwent LmSw. Median age and weight at operation was 2 years and 12 kg, respectively. 7 patients underwent a staged procedure and 2 patients underwent a primary pull through. 8 patients had classical recto-sigmoid HD. The median operating time was 220 minutes. The median time to full feeds and hospital stay was 36 hours and 5 days, respectively. Median follow up duration is 6 months. 8 out of 9 patients have attained regular stooling pattern without incontinence. 1 patient required occasional rectal washouts for intermittent constipation. 1 patient had post-operative enterocolitis which was managed conservatively. Conclusion: LmSw is a feasible, safe and effective procedure for the laparoscopic management of HD in children with acceptable short term results.

V029 RETURN OF THE BANANA KNIFE: AN ALTERNATIVE INSTRUMENT FOR THE LAPAROSCOPIC PYLOROMYOTOMY

Heather M Grant, MD[1]; Kevin P Moriarty, MD, FACS, FAAP[2]; Gregory T Banever, MD, FACS, FAAP[2]; Victoria K Pepper, MD[2]; David B Tashjian, MD, FACS, FAAP[2]; Michael V Tirabassi, MD, FACS, FAAP[2]; [1]UMass Medical School - Baystate; [2]Baystate Children's Hospital

Background: When the disposable arthroscopic banana knife(Linvatec, Largo,FL) became unavailable, many pediatric surgeons adapted the use of spatula tip cautery for laparoscopic pyloromyotomy; however, reusable arthroscopic knives remain readily available.

Methods: We compared operative time, room time, and time to discharge between laparoscopic pyloromyotomy with a reusable arthroscopic banana knife(Sklar, West Chester,PA, catalog #45-6050) and spatula tip cautery.

Results: Overall, 108 patients underwent pyloromyotomy for pyloric stenosis between September 1, 2012 and December 31, 2019: 11(10.2%) open and 74(68.5%) laparoscopic with spatula tip cautery, 22(20.4%) with the banana knife, and one(0.9%) with the stortz pyloromyotomy knife. There were no significant differences in operative time(p=0.61), room time(p=0.41), or time from surgery to discharge(p=0.26) between procedures using the banana knife and those using the cautery spatula tip. There were no perforations or recurrences.

Conclusion: The reusable banana knife is a safe and effective alternative to spatula tip cautery for laparoscopic pyloromyotomy.

V030 LAPAROSCOPIC ROUX-EN-Y GASTROJEJUNOSTOMY IN A 2 YEARS OLD CHILD WITH GASTRIC OUTLET OBSTRUCTION

Emre Divarci[1]; Ozge Kilic[1]; Hudaver Alper[2]; Miray Karakoyun[3]; Sema Aydogdu[3]; [1]Ege University, Faculty of Medicine, Department of Pediatric Surgery; [2]Ege University Faculty of Medicine, Department of Pediatric Radiology; [3]Ege University Faculty of Medicine, Department of Pediatric Gastroenterology

Corrosive agent ingestion causes more esophageal patologies than gastric outlet obstruction(GOO). This study reports a total GOO case following intake of nitric acid.

A 2-year-old boy with a history of descaler intake a month ago and presented with nonbilious vomiting after each oral feeding. Gastric burn and fibrosis including GOO were found in endoscopy. Imaging showed no passage to duodenum . Laparoscopic gastrojejunostomy was planned. Transumbilical 10mm camera and two 5mm working ports were inserted on upper abdomen. Jejunum, 25cm from Treitz ligament transected extracorporeally by lineer stapler. Gastrojejunostomy was performed side by side of distal jejunum and stomach using endoscopic stapler and procedure followed by extracorporeal jejunojejunostomy at 50cm to Treitz. Postoperative imaging demonstrated easy transit to jejunum. He was discharged with total oral feeding.

Corrosive acids can lead to burn and obstruction of gastric outlet. Laparoscopic Roux-en-Y gastrojejunostomy is a useful procedure for suitable patients and experienced centers.

V031 LAPAROSCOPIC PYLORUS PRESERVING PANCREATODUODENECTOMY FOR PANCREATIATIC HEAD ARTERIOVENOUS MALFORMATION IN A 2-YEAR INFANT Sokolov Yuri, MD[1]; Efremenkov Artem, MD[1]; Vilesov Aleksei[2]; Karaseva Olga, MD[3]; Haritonova Anastasia, MD[3]; Kotlovsky Anatoly, MD[1]; [1]Russian Medical Academy of Continuous Professional Education; [2]St Vladimir Children s Hospital; [3]Clinical and Research Institute of Emergency Pediatric Surgery and Trauma

Background: Here we report a pediatric case of laparoscopic pylorus preserving pancreatoduodenectomy

successfully performed for the first time for an extraordinarily rare yet potentially life-threatening pancreatic arteriovenous malformation (AVM).

Case description: A 2-year old male presented with a history of recurrent episodes of massive gastrointestinal bleeding. Gastroduodenoscopy revealed submucosal haemangiomatosis appearance in 2nd part of the duodenum. The imaging studies including doppler-US, CT-contrast enhanced and selective angiography showed a diffuse vascular lesion in the pancreatic head. With the established diagnosis of the pancreatic AVM, laparoscopic pylorus preserving pancreatoduodenectomy with double jejunal loop reconstruction was carried out fully intracorporeally. The procedure took about 300 minutes. The blood loss was approximately 150 ml. Postoperatively, there were no biliary-pancreatic complications. During 2-year follow-up the patient has been asymptomatic.

Conclusion: Laparoscopic pylorus preserving pancreatoduodenectomy is feasible and curative for extremely rare pancreatic head AVM in children even at an early age.

V032 SUPERIOR MESENTERIC SYNDROME LAPAROSCOPIC DUODENO-JEJUNOSTOMY VS Narayana Kotte, MS, MCh; Osmania Medical College

Aim: To share our experience of management of SMA syndrome by minimal access approach a rare condition in children

Method: seven years old boy presented with intermittent pain abdomen, non-bilious vomiting, loss of weight. On evaluation with CT ANGIO, diagnosis confirmed showing 3rd part of duodenum forked, compressed between abdominal aorta and superior mesenteric artery- SMA SYNDROME. Laparoscopic duodeno-jejunostomy performed with the help of three 5mm ports in 3hrs time. Four-layer anastomosis with 3-0 mersilk and polyglactin suture, hand sewn. First and 4th layer continuous suture and second and 3rd layer interrupted suturing. no drain kept

Results: Postoperative period uneventful. Feeds started 5th POD, discharged 8th POD. Patient on follow up asymptomatic, good weight gain.

Conclusions: SMAS a rare condition in children which we could manage by MAS approach successfully, and can be advocated as a procedure of choice, to it's advantage.

V033 EARLY LAPAROSCOPIC DUODENOJEJUNOSTOMY SHOULD BE PERFORMED IN ADOLESCENT FEMALES WITH ANOREXIA AND CONSECUTIVE SUPERIOR MESENTERIC ARTERY SYNDROME (SMAS) - A CASE REPORT WITH VIDEO PRESENTATION Thomas M Benkoe, MD; Patrick Sezen, MD; Martin L Metzelder, MD; Department of Pediatric Surgery

The SMAS is a still poorly recognized pathology. Symptoms include postprandial pain, nausea vomiting and weight loss. There is consensus to start with conservative treatment. There are several causes exemplarily like postoperative SMAS after scoliosis correction of the spine. In some cases, it might be difficult to distinguish between cause and consequences for SMAS. To this regard, anorexia is a major issue as patients deny temporary nutrition by nasogastric-tube or other modalities so that the time period of intermittent intravenous nutrition should be kept as short as possible and thus, an operation should be the first line treatment while the patient is accompanied by challenging psychiatric treatment. We present our case and video of a 15 years old female with anorexia who underwent an early successful laparoscopic duodenojejunostomy for subsequent anorexia.

V034 LAPAROSCOPIC CYSTOGASTROSTOMY IN A PATIENT WITH PANCREATIC PSEUDOCYST FOLLOWED BY MSUD Firat Serttürk; Anar Qurbanov; Ergun Ergün; Gülnur Göllü; Meltem Bingöl Kologlu; Sumeyye Sozduyar; Ankara University Faculty of Medicine, Department of Pediatric Surgery

Introduction: It is aimed to present the laparoscopic treatment of pancreatic prodocyst in the patient followed by MSUD.

Case: A four-year-old girl followed with MSUD. Magnetic resonance cholangiopancreatography showed that the cyst extended to the diaphragm level. The patient underwent laparoscopic cystogastrostomy in the period without pancreatitis. During laparoscopy, the contents of the cyst were evacuated with the Veres needle, and the opposing window was opened on the anterior wall of the stomach and on the cyst. Afterwards, these windows were continuously sutured and cystogastrostomy was completed. Postoperatively seventh day, contrasty gastrography was performed and no anastomosis leak was detected. The patient was started feeding. No cystic structure was observed in the control USG, which was seen three months after the operation.

Conclusion: Laparoscopic cystogastrostomy is a safe and feasible method in patients with pancreatic pseudocysts.

V035 SINGLE INCISION LAPAROSCOPIC GASTROSTOMY BUTTON PLACEMENT: A SIMPLE AND EFFECTIVE TECHNIQUE Michael J Leinwand, MD; Bronson Children's Hospital

We are very excited to present a new single incision laparoscopic surgery (SILS) technique for gastrostomy button placement. It is based on a procedure previously created by Todd Ponsky, but with several modifications. In addition to a video demonstration of the operation, we present data from a retrospective review of our first 26 patients. This new technique is very simple. It does not utilize a Veress needle, trocar, or electrocautery. There is no wound except for the gastrostomy itself. There are no dressings or sutures to remove. Operative time is about 30 minutes. We hope that this presentation will make a real difference in the lives of the patients of the IPEG membership.

V036 "WHEN IN DOUBT" – THE DIAGNOSTIC CHALLENGES OF GASTRIC DUPLICATION CYSTS IN CHILDREN: A CASE REPORT AND VIDEO PRESENTATION Anja C Weinhandl, MD; Thomas M Benkoe, MD; Martin L Metzelder, MD; Department of Pediatric Surgery

Gastric duplications are rare congenital alimentary tract anomalies accounting for approximately 4-9% of all gastrointestinal tract duplications. The multitudinous differential diagnoses and the radiological ambiguity often lead to misdiagnosis, particularly in asymptomatic children. Malignant transformations are rare, however, subsequent surgical excision in early childhood period is usually advocated to avoid potential morbidity. Hence, additional examinations are necessary, including endoscopic investigations and finally laparoscopic intervention. We report the case of a 2-year old boy with a gastric duplication cyst (CDG), which was successfully treated by laparoscopic resection. Within our case, only laparoscopic exploration was capable of directly diagnosing a CDG. Not only the symptomless child, but the location of the cyst at the posterior wall of the stomach and the missing connection to the gastric cavity, has hindered the final diagnosis. To demonstrate the complexity and diagnostic challenge in that case, we would like to present a short and striking video.

V037 GALLBLADDER AGENESIA, AN UNEXPECTED INTRASURGICAL DIAGNOSIS Joaquín Camacho, MD; Santiago Calello, MD; Gastón Elmo, MD; Hospital Italiano de Buenos Aires

Gallbladder agenesia is a rare condition wich requires proper diagnosis. Laparoscopy is an excellent method for this. Intra surgical cholangiography and intra surgical echography showed to be important tools when it comes to the arrival of a proper diagnosis.

17 year-old patient without previous history of disease who presented recurrent abdominal pain. The patient consulted the emergency-room. An ultrasound informed: Gallbladder difficult to visualize. Replacing it, a calcified 40 mm image compatible with a scleroatrophic vesicle is observed.

Patient was discharged because of clinical improvement and a new ultrasound was performed during the follow up which informed: Distended Gallbladder with walls 4.6 mm in width together with multiple vesicular lithiasis and inflammatory fluid surrounding gallbladder.

Due to these dissimilar ultrasound discoveries together with the clinical state of the patient who suffered recurrent abdominal pain, laparoscopic surgery was indicated.

This allowed a proper diagnosis of the patient clinical picture.

V038 LAPAROSCOPIC HEPATICO-JEJUNOSTOMY FOR CONGENITAL BILIARY DILATATION WITH ABERRANT RIGHT HEPATIC ARTERY AND BILIARY TRACT Shun Onishi, MD, PhD; Tatsuru Kaji, MD, PhD; Koji Yamada, MD, PhD; Mayu Matsui, MD; Ayaka Nagano, MD; Masakazu Murakami, MD; Koshiro Sugita, MD; Keisuke Yano, MD; Toshio Harumatsu, MD; Waka Yamada, MD, PhD; Makoto Matsukubo, MD; Mitsuru Muto, MD, PhD; Satoshi Ieiri, MD, PhD; Department of Pediatric Surgery, Kagoshima University

We report successful laparoscopic choledochal cyst excision and hepaticojejunostomy with aberrant right hepatic artery and bile duct from caudate region.

Operative procedure: We found the right hepatic artery coursed across front of the hepatic duct. In addition, a duct was identified next to the main hepatic duct. At first, we thought it was a lymphatic vessel and dissected from main hepatic vein. However after dissecting the duct, bile flowed out from the duct and finally we confirmed it the aberrant bile duct (1mm in diameter) from caudate region. We anastomosed the bile duct from caudate region to main hepatic duct and made them a double–barrel duct using 6-0 absorbable suture.Both posterior and anterior walls were approximated using interrupted 5-0 monofilament intracorporal knot tying without sacrificing right hepatic artery.

Result and conclusion: Postoperative course was uneventful. Hepaticojejunostomy can be performed safely even with aberrant artery and bile duct.

V039 HEPATODUODENAL TERATOMA ARISING FROM COMMON HEPATIC DUCT Malek E Ayoub, BS[1]; Abdul-Rahman K Abdel-Raheem, BS[1]; Tamer Ashraf, MD[2]; Sabina Siddiqui, MD[3]; [1]Medical College of Wisconsin; [2]Mansoura University; [3]Children's Wisconsin

Germ cell tumors are common in pediatric populations and are famous for their variable location. However, only 15 cases of tumors arising from the hepatoduodenal ligament have been previously documented in the literature, and only 3 arising from the common hepatic duct. To the best of our knowledge, we present the fourth documented case of a teratoma arising from the common hepatic duct in a 5 years-old patient, and the only reported laparoscopic excision with biliary reconstruction. This case report adds to the literature on this rare tumor and illustrates steps that make a laparoscopic approach feasible. One of the advantages of laparoscopy was the ability to surgically manage postoperative bile leak postoperative day 4, thus significantly shortening the time to feeding and length of stay. Furthermore, this is the first case of its kind performed in Egypt.

V040 THE "SHIFT" SHUNT: SUPRAHEPATIC INTRAFALCIFORM TUBING PLACEMENT FOR PLACEMENT OF VENTRICULOPERITONEAL SHUNTS Cody Lendon Mullens, MPH; Jesse Lawrence, MD; Hal Meltzer, MD; Dan W Parrish, MD; West Virginia University School of Medicine

Ventriculoperitoneal (VP) shunts in pediatric patients are generally associated with low intra-abdominal morbidity. However, there are known intra-abdominal complications that can arise subsequent to VP shunt placement. We describe a novel approach for placement of VP shunts that we hypothesize can stand the potential to further reduce potential morbidity. Utilizing the falciform ligament of the liver and the subphrenic recess to suspend and maintain the shunt can portend fewer iatrogenic intra-abdominal injuries, enhanced ease of shunt removal, provide a large surface area for absorption of drained cerebrospinal fluid, and result in fewer adhesions secondary to shunt placement. Furthermore, the SHIFT approach permits smaller incisions for shunt placement, thus leading to a theoretical smaller chance of surgical site infection following placement. The SHIFT shunt is fashioned by inserting Maryland forceps into the abdomen, dissecting a window in the falciform ligament, inserting the shunt, and placing shunt tubing in the subphrenic recess.

V041 UNCOMMON FINDING DURING COMMON PROCEDURE Malgorzata Fryczek; Wojciech Górecki, PhD;
Department of Pediatric Surgery, Jagiellonian University Medical College, University Children's Hospital of Cracow, Poland

The list of differential diagnosis for appendicitis is still incomplete. We present uncommon finding in 15-years-old girl with lower quadrant abdominal pain. The girl underwent laparoscopy that showed patological structure with the base in jejunal mesentery, ended on the posterior abdominal wall. Excision of the structure was performed. Histopathology showed fibrous tissue and calcification, without a precise diagnosis of the origin of the lesion. This case shows that laparoscopy is superior method as a diagnostic and therapeutic tool, because even suspected appendicitis may surprise you anytime.

V042 INFANT WITH BILATERAL PULMONARY SEQUESTRATIONS WITH COMMON VENOUS DRAINAGE EXCISED BY VIDEO-ASSISTED THORACIC SURGERY Kan Suzuki, MD, PhD; Jun Fujishiro, MD, PhD; Mariko Yoshida, MD, PhD; Eiichiro Watanabe, MD, PhD; Kotaro Tomonaga, MD; Kazue Miyake; The University of Tokyo Hospital

The case was a 1-year-old boy diagnosed with right pulmonary sequestration (PS) during the fetal period. Computed tomography at 6 months revealed right intralobar and left extralobar PS. The common drainage vein of the both PS flows into the right lower pulmonary vein, and there is a risk of thromboembolism in the remaining drainage vein because we cannot reach to the root of the vein if we excise only the left PS with left thoracic approach. While only the right PS is removed by right lower lobe resection with right thoracic approach, there will be concern about the risk of congestion or rupture of remaining left PS. At 18 months, bilateral simultaneous surgery was performed. First, thoracoscopic left extralobar PS resection and ligation of feeding artery of right intralober PS was performed, and thoracoscopic right lower lobectomy was subsequently performed. There was uneventful during and after this operation.

V043 MANAGEMENT OF BRONCHO-ESOPHAGEAL FISTULA AFTER BUTTON BATTERY INGESTION

Katherine C Ott, MD[1]; Jamie C Harris, MD[1]; Katherine A Barsness, MD[1]; Jesse Arseneau[1]; Saied Ghadersohi, MD[2]; Mehul V Raval, MD[1]; [1]Ann and Robert H. Lurie Children's Hospital, Division of Pediatric Surgery; [2]Ann and Robert H. Lurie Children's Hospital, Division of Otorhinolaryngology - Head and Neck Surgery

An 18 month old male presented after his mother noted drooling, non-bilious emesis, and a metallic smell to his breath. On evaluation, he was drooling without stridor and a chest x-ray demonstrated a radiopaque foreign body with halo sign and step-off concerning for a button battery. He underwent rigid esophagoscopy and a 3 volt, button battery was removed. The mid esophagus had near circumferential mucosal injury, penetrating through the mucosa into the muscular layer. Bronchoscopy revealed a broncho-esophageal fistula on the posterior wall of the right mainstem bronchus just past the carina. A fenestrated nasogastric tube for local control of secretion and a feeding jejunostomy was placed. Six weeks later, the fistula was smaller and the patient underwent a thoracotomy for division and repair of the fistula. An intercostal muscle flap interposed to buttress the bronchus repair. Oral feeds were initiated and he was discharged home.

V044 TRAUMATIC DIAPHRAGMATIC INJURY IN A CHILD: THE VALUE OF THORACOSCOPY IN SURGICAL EXPLORATION Sara C Fernandes, MD; Sofia Vasconcelos-Castro, MD; Gabriela Reis, MD; Miguel Soares-Oliveira, MD; Department of Pediatric Surgery - Centro Hospitalar Universitário São João

Domestic childhood accidents are a global health problem associated with significant morbidity. Kitchen appliances are potential dangers to children, not always recognized by adults.

Herein we present a case of a 3 year-old girl that presented to the emergency department with a penetrating thoracic wound after falling on a dishwasher with a sharpened object pointing upwards.

The workup including a toraco-abdominal CT showed no other lesions besides the evidence of air in the thoracic and abdominal cavities. Surgical exploration was decided. A 5 mm scope was inserted on the thoracic wound and allowed the diagnosis of a diaphragmatic laceration and a small sub capsular liver hematoma. The laceration was repaired and the patient had an unremarkable recovery.

By reporting this case we aimed to highlight the versatility of endoscopic surgery even in non-conventional situations that in this specific case allowed to diagnose an occult diaphragmatic injury.

V045 THORACOSCOPIC REMOVAL OF AN INTRATHORACIC EXOSTOSIS OF THE POSTERIOR ARCH OF THE SECOND LEFT RIB CAUSING A SYMPTOMATIC COMPRESSION OF THE THIRD INTERCOSTAL NERVE Jerry Kieffer, MD; Monika Glass, MD; Paul Philippe, MD; Cindy Gomes, MD; Flaum Valérie, MD; Kannerklinik Luxembourg

Exostosis or osteochondroma is the most common form of benign bone tumor in children. Surgery is only indicated in symptomatic cases or in the exceptional eventuality a transformation into chondrosarcoma is suspected. We present the case of a 14 years old boy with left upper thoracic pain since 3 month prior to surgery. Standard x-ray and CT-scan showed an osteocartilaginous lesion with exclusive intrathoracic growth of the posterior arch of the second rib, occupying the second intercostal space, deforming the third rib with compression of the third intercostal neurovascular bundle. Surgery consisted of a thoracoscopic en bloc resection with osteotomies of the second rib medial and lateral to the osteochondroma's pedicle performed under left lung exclusion, the patient being in beach chair position. Two 10mm portals for the camera and instruments were placed in the anterior second intercostal space. The video shows the different steps of the procedure.

V046 THORACOSCOPIC LEFT UPPER LOBECTOMY FOR CONGENITAL LOBAR EMPHYSEMA AND BRONCHOGENIC CYST EXCISION. Parker R Mullen, MD; James D Roy, MD; Charles W Hartin, Jr., MD, FACS, FAAP; Hanna Alemayehu, MD, FACS, FAAP; USA Health

This video demonstrates a thoracoscopic left upper lobe lobectomy for congenital lobar emphysema and concurrent bronchogenic cyst excision from the left mainstem bronchus in an eight month old child. The video demonstrates excellent thoracoscopic access to the left pulmonary hilum as well as access to the mediastinum allowing concurrent resection of the bronchogenic cyst. Further, this demonstrates safe technique for controlling and dividing the pulmonary vessels with a sealing device. The patient's preoperative workup and postoperative course are also briefly reviewed.

V047 RIGHT CONGENITAL DIAPHRAGMATIC HERNIA OR EVENTRATION? THORACOSCOPIC EVALUATION AND REPAIR Modupeola Diyaolu, MD; Rachel Landisch, MD; Matias Bruzoni, MD, FACS; Stanford University Medical Center

A 10 month-old female underwent thoracoscopic left-sided CDH repair on second day of life. At 9-month follow-up, she presented to the pediatric general surgery clinic with primary complaint of chronic hiccups. Imaging was concerning for right CDH vs eventration. Patient was taken for thoracoscopic evaluation.

A posterolateral defect was identified with a thin membranous sac and diaphragmatic weakness. Diaphragmatic plication was completed first by taking several bites of the weakened diaphragm/sac with a spinal needle through which 2-0 Ethibond was passed and tied. The diaphragm was mobilized to cover the area of the posterolateral defect, U-stitches were placed around the rib, and tied in the subcutaneous tissue.

This is a case of bilateral CDH that presented at different times. Often the boundary between hernia and eventration is difficult to determine requiring both diaphragmatic plication and defect repair. A thoracoscopic repair is safe and effective approach for diagnosis and treatment.

V048 SUCCESSFUL TRANSECTION OF AN H-TYPE TRACHEOESOPHAGEAL FISTULA USING A 5MM STAPLER FOLLOWED BY 4K ULTRA-HIGH-DEFINITION THORACOSCOPIC REPAIR. Takanori Ochi[1]; Yuichiro Miyake[1]; Masafumi Tanaka[1]; Shogo Seo[1]; Go Miyano[1]; Hiroyuki Koga[1]; Geoffrey J Lane[1]; Kumi Kataoka[2]; Kinya Nishimura[2]; Atsuyuki Yamataka[1]; [1]Department of Pediatric General and Urogenital Surgery, Juntendo University School of Medicine; [2]Department of Anesthesiology and Pain Medicine, Juntendo University School of Medicine

H-type tracheoesophageal fistula (H-TEF) was treated by 4K ultra-high-definition thoracoscopy after successful transection with a 5mm stapler. A 19-day-old Japanese girl born at 38 weeks gestation by spontaneous vaginal delivery was referred for persistent vomiting, cyanosis, and cough since birth. She weighed 2.4kg. Bronchoscopy identified H-TEF between T2 and T3 vertebrae when a guidewire passed from the trachea into the esophagus. After nasogastric tube feeding, she weighed 5.2kg at 4 months old. Preoperatively, a guidewire was passed from the trachea, through the H-TEF, and out of the mouth using bronchoscopy/endoscopy-assistance. Surgery was performed in the left lateral decubitus position, slightly prone, using four 5mm trocars, initially. The H-TEF with guidewire was exposed and encircled with two vessel loops for traction so a stapler inserted through an additional trocar placed in the 7th intercostal space in the posterior axillary line could be fired without injuring the esophagus/trachea. Recovery was uneventful.

V049 ZINNER SYNDROME: AN UNEXPECTED CASE REPORT Inês Braga, MD[1,2,3]; Catarina Barroso, MD[1,2,3]; Nuno Morais, MD[4]; José Luís Carvalho, MD[5]; Emanuel Dias, MD[2,3,4]; Jorge Correia-Pinto, MD, PhD[1,2,3]; [1]Department of Pediatric Surgery, Hospital de Braga, Braga, Portugal; [2]Life and Health Sciences Research Institute (ICVS), School of Medicine, University of Minho, Braga, Portugal; [3]ICVS/3B's – PT; Government Associate Laboratory, Braga/Guimarães, Portugal; [4]Department of Urology, Hospital de Braga, Braga, Portugal; [5]Department of Pediatric Surgery, Hospital de Braga, Braga, Portugal

We report a clinical case and video of a Zinner syndrome in a 17 years-old teenager, that has been followed in outpatient clinical by multiple episodes of occasional pain and swelling in left testicle, painful ejaculation and dysuria since his 13 years-old. During investigation a CT-scan revealed a left renal agenesis and subsequent MRI presented an ipsilateral dilatation of seminal gland and ejaculatory duct obstruction. This finding was compatible with a Zinner syndrome, a rare congenital malformation of during mesonephric duct development between the 4th and 13th gestational week. The majority of patients remain asymptomatic and are incidentally reported and treated conservatively. Given his symptomatology, an exploratory minimal invasive laparoscopic approach was performed with identification of a cystic seminal gland in continuum with ectopic left ureter. Cystic gland, left ureter and ejaculatory duct were dissected and excised. There were no complications postoperatively and the patient remains asymptomatic during follow up.

V050 AN UNUSUAL CAUSE OF GROSS HEMATURIA : RENAL PAPILLARY HYPERTROPHY Guillaume Rossignol, MD[1]; Lena Paganelli, MD[1]; Manon Aurelle, MD[2]; Justine Bacchetta, MD, PhD[2]; Pierre Mouriquand, MD, PhD[1]; Aurore Bouty, MD[1]; Delphine Demede, MD[1]; [1]Department of Pediatric Surgery, Hôpital Femme Mère Enfant, Lyon; [2]Department of Pediatric Nephrology, Hôpital Femme Mère Enfant, Lyon

A 13 year-old-boy with a history of sickle cell disease was admitted for painless gross hematuria with no other urological or general symptoms. Renal tract ultrasound and Computed Tomography revealed no renal abnormality except a small bladder clot. Sickle cell nephropathy was the main hypothesis because of associated proteinuria.

Subsequently hemoglobin dropped down to 3g/dL with persistent hematuria. Arteriography was unremarkable. The patient then underwent a cystoscopy which demonstrated blood coming from the left ureteral orifice. Left retrograde pyelography showed some defects in the calyces. Therefore a left ureteroscopy was performed and showed a mild hypervascular renal papillary hypertrophy in all calyces. Bleeding had stopped and biopsies were performed. Pathology specimen revealed fragments of benign renal medulla.

Renal papillary hypertrophy is a rare and benign cause of renal hematuria. It can be managed conservatively and should be searched to avoid misleading diagnosis and harmful kidney surgery.

V051 OVARIAN TORSION - GO SINGLE PORT! Sofia Vasconcelos-Castro; Sara Fernandes; Miguel Soares-Oliveira; Centro Hospitalar Universitario Sao Joao

Introduction: Ovarian torsion is rare in children, requiring prompt surgical intervention. We briefly describe our experience in treating this entity with single-port laparoscopy and present a video of its usage.

Video description: This is a case of a 9-year-old girl presenting with acute abdominal pain and vomiting for 6 hours. Ultrasound showed evidence of ovarian torsion. Using a 10mm endoscope with an inbuilt 6mm working channel (HOPKINS® Straight Forward Telescope 0; Karl Storz) through the umbilicus, a right ovarian torsion was identified. The torsion was reduced and the ovary positioned to an anatomical normal position using one instrument. Operative time was 40 minutes.

Discussion: In our department, 3 cases of ovarian torsion without associated ovarian lesions were managed using single-port laparoscopy. This technique, although rarely reported, is safe, easy and effective for pediatric ovarian torsion, and should be considered as the first option in these cases.