EPSA 2018
13 – 15 November 2018
Aswan

Video Session I

1. Laparoscopic reduction for infantile intussusception, is it safe & feasible?
   Mohamed El Sawaf, *Maged Khair Allah, Hamed Seleim, Khalid Ismail.* ***Tanta, Egypt.***
2. "Bird's-on" laparoscopy-assisted versus conventional laparoscopic appendectomy
   Ahmed Khairy*.* ***Alexandria, Egypt.***
3. Laparoscopic assisted pull through of long segment Hirschsprung's disease. No energy devices**.**
   Akram El Batarny*.* ***Tanta, Egypt.***
4. Laparoscopic duodenal atresia repair.
   Martin Lacher**, Germany.**
5. Laparoscopic repair of neonatal duodenal atresia. (Analysis of our current practice and outcome).
   Mohamed El Barbary*, Gamal El Tagy, Khaled Bahaa El Din, Ahmed Fares, Ahmed Wishahy, Hamed Seleim, Basma Magdy, Reda El Kadi, & Momen Farouk.* ***Cairo, Egypt.***
6. Laparoscopic Ladd's procedure. How to find your way?
   Tamer Ashraf*.* ***Mansoura, Egypt.***
7. Para-caecal hernia in a 4-year old child (A case report).
   Hany Embaby, *Amir Maerouf.* ***Ahmed Maher H., Egypt. .***
8. Laparoscopic partial splenectomy in Pediatric age group. CUSPH experience.
   Hamed Seleim, *Ahmed Kadry, Osama Abd El Azeem, Khaled Salah, Moataz Ragab, Sayed Khedr, Mostafa Dessouky, Ahmed Fares, Sherif Kaddah, Gamal El Tagy & Mohamed El Barbary.* ***Cairo, Egypt.***
9. Laparoscopic management of giant liver hydatid cysts*.
   Najeh El Omari*.* ***Amman, Jordan****.*

Video Session II

1. Thoracoscopic Nuss procedure.
   Michele Torre*, Italy.*
2. Thoracoscopic management of Bochdalec hernia. The difficult lateral triangle (The Bermuda triangle)
   Sameh Shehata*.* ***Alexandria, Egypt.***
3. Surgical repair of CDH with associated extra-lobar pulmonary sequestration.
   Rami Salama *, Mohamed Shalaby, Hisham Fayyad, Hisham El Mohammady & Sherif Shehata****. Tanta, Egypt.***
4. Thoracoscopic excision of large mediastinal tumors**.** Challenges encountered**.**
   Mohamed Hassan*.* ***Zagazig, Egypt****.*

5. Laparoscopy for adrenal masses in pediatric age group.
   Gamal El Tagy, ***Ahmed Fares****, Haytham Essmat, Ayman Hussein & Sayed Khedr.* ***Cairo, Egypt.***
6. Laparoscopic repair of hiatus hernia: Tips to avoid recurrence.
   Sameh Shehata. Alexandria, Egypt.
7. T3 versus T2 thoracoscopic sympathectomy for palmar hyperhidrosis**.**
   Ahmad El Hattab*, Ahmed Adawy, Sherif Abd El Maksoud, Tamer Wafa, Radi El Sherbini, Adham El Saied.* ***Mansoura, Egypt****.*
8. Fascinating application of sewing machine like suturing: A new simplified technique for intracorporeal suturing.
   Rafik Shalaby. Azhar, Cairo.
9. Laparoscopic excision of presacral teratoma.
   Najeh El Omari*.* ***Amman, Jordan****.*

Video Session III: Nightmares in Pediatric Laparoscopy

1. Laparoscopic cholecystectomy (A simple procedure turning sour).
   Adham El Saied *& Mohamed El Sherbiny.* ***Mansoura, Egypt.***
2. Laparoscopic choledochal cyst excision. (My nightmare).
   Adham El Saied *& Tamer Ashraf.* ***Mansoura, Egypt.***
3. Thoracoscopic repair of TEF: Beware of proximal TEF.
   Mohamed Saber *& Khaled El Asmar.* ***Ain Shams, Egypt.***
4. Avulsion of ampulla of Vater. (Rare case presentation & review of literature).
   Medhat El Sayed*, Shaban Moustafa & Mohamed Abou El Fadl.* ***Al Azhar, Egypt.***
5. Mucosal injury of laparoscopic Pyloromyotoy.
   Ahmed Kadry*, Gamal El Tagy,Mohamed El Barbary, Ahmed Fares, Hamed Seleim, Khaled Salah Abd El Latif.* ***Cairo, Egypt***

Thyroid tumors in pediatric age group.

Gamal EL Tagy , Mohamed El Barbary, Sherif Kaddah, Ayman Hussein, Ahmed Arafa & ***Sayed Khedr***. ***Cairo, Egypt***.

Introduction:

Thyroid cancer represent 3% of all childhood malignancies, and 7% of head and neck tumors, with a peak incidence between 10-18 years of age and female to male ratio 2:1 .

The vast majority of thyroid carcinomas in children and adolescents is papillary TC; follicular TC (FTC) is exceedingly rare.

Papillary thyroid carcinoma: represent 70-80% of all thyroid malignancies

Aim:

Retrospective analysis of the thyroid tumors that underwent surgeries in Abo rich hospital in corporation with NCI Cairo University in the last year.

Method:

Retrospective analysis of the thyroid tumors that treated in our institute based on multidisciplinary team in corporation with NCI in the period from June 2017 to October 2018.

Results:

We managed 6 cases of thyroid tumors with different history pathologies (2 cases of papillary thyroid carcinoma, 2 cases of follicular thyroid adenomas and 1 case of follicular thyroid carcinoma) with very good outcome.

Conclusion:

The purpose of this study is to provide a comprehensive overview regarding the spectrum of thyroid tumors in the pediatric population, both benign and malignant, and their surgical management based on multidisciplinary team.

Key words: Thyroid, papillary, follicular, Surgery.

Changes of the microbiome, inflammatory profile & bile acids in a murine model of hepatoblastoma.

Margarita Kaiser, Georg Singer, Karl Kashofer, Guenter Fauler, ***Ahmed El Haddad****, Gert Warncke, Holger Till & Christoph Castellani.* ***Tanta, Egypt***.

Aim of the study: To investigate if hepatoblastoma (HB) causes disturbances of the fecal microbiome, inflammatory response and stool and serum bile acid (BA) profile in a murine model.
Methods: Ten mice received sub-peritoneal transplantation of 2 depots with 1.5 million HuH6 cells each (HbG); another 10 received 2 depots with PBS puffer (sham group, ShG). Glucose tolerance test was performed before euthanasia 7 weeks after tumor implantation. White adipose tissue (WAT), gastrocnemius and soleus muscles were dissected. BA profile was determined by ultrahigh performance liquid chromatography coupled mass spectroscopy from stool and serum samples. Fecal microbiome was assessed by 16S rDNA pyrosequencing. Milliplex® assays (MCYTOMAG-70K and TGFBMAG-64K-03) were used to determine serum cytokines.
Main Results: Three mice died peri-operatively (2 HbG, 1 ShG) and 3 did not develop tumors. HbG animals had a beginning catabolic state with significant depletion of WAT and an impaired glucose tolerance. Pyrosequencing showed increased abundance of Ruminococcus, Sutterella, Anaeroplasma and Odoribacter in the HbG. There were no significant differences in serum and stool BA. HbG were in a pro-inflammatory state with elevated Interleukin 6 and decreased tissue growth factor beta.
Conclusions: In a murine model, hepatoblastoma is associated with alterations of the metabolism characterized by depletion of adipose tissue, moderate changes of the fecal microbiome and a pro-inflammatory state.

Juvenile granulosa cell tumors: A study of rare cases over a period of 15 years in a single institute.

Yasser Saad El Din. ***Alexandria, Egypt***.

Background:
Ovarian tumors in children are rare, comprising 1% of all childhood tumors. The sex cord-stromal cell tumors are very uncommon heterogenous group of these gonadal tumors as they represent 7-10% of the ovarian tumors in children.
Juvenile granulose cell tumors are very rare subtype of these sex cord-stromal cell tumors.

Objective:
This study aimed at reporting and studying cases of Juvenile Granulosa Cell tumors over a period of 15 years.

Patients of the study:
Nine cases of Juvenile Granulose Cell tumors were reported over a period of 15 years. Five cases were reported retrospectively and four cases prospectively.

Methodology:
All cases of Juvenile Granulose Cell tumors admitted and treated over a period of 15 years in the Main Hospital of Alexandria University-Egypt were reported. They were studied concerning: the age of presentation, the different ways of clinical presentation, the data of laboratory investigations including the tumor markers :(AFP & HCG), and the imaging modalities for diagnosis. The treatment procedures as well as the follow-up of these cases were also reported and studied.

Results:
Nine cases of Granulose Cell tumors were reported: 5 cases were retrospective and 4 cases were prospective. The age range was from 7months to 6 years: 8 cases were with a range 4-6 years and only one case was 7 months old.
All cases presented with different manifestations of pseudo-precocious puberty in the form of breast hypertrophy with extensive suprapubic hair in 6 cases, breast hypertrophy with enlarged clitoris in one case, suprapubic hair with huge intra-abdominal swelling in one case and massive vaginal bleeding in one case.
Tumor markers: (AFP) and (HCG) are negative in all cases
Ultrasonography was done for all cases and verified the presence of unilateral solid ovarian tumors in 7 cases, a huge ovarian swelling with mixed solid and cystic elements in one case and a small ovarian cyst in one case.
All cases were treated surgically in the form of unilateral total oophorectomy in 8 cases and partial oophorectomy in that case with a small ovarian cyst.
The histopathological study of the lesions removed revealed benign granulose cell tumor in all cases.
Follow-up revealed regression of the manifestations of precocious puberty over a period ranged from 10 days to 120 days.

Conclusion:

*Biologically active ovarian tumors should be put in mind in our clinical practice once we are confronted with any girl presented with
Pseudo-precocious puberty.
*Ovarian tumors in pre-pubertal girls with negative tumor markers: AFP and HCG, Sex Cord-Stromal Cell tumors should be considered and differentiated from functioning germ cell tumors including the ovarian carcinoma.
*Unilateral oophorectomy is the definitive curative treatment because they are mostly benign and unilateral

Gastric outlet obstruction in children.

Ahmed Khairi. ***Alexandria, Egypt***.

Gastric outlet obstruction constitutes an uncommon category of pediatric surgical problems. Though uncommon, it usually presents as a challenge to the surgeon. Clinical diagnosis, imaging interpretation and proper way of management are all areas of controversy. Alexandria pediatric surgery department has a big series of cases with interesting scenarios. We present our experience over a period of ten years and suggest a guideline for the proper way of management based on our outcomes.

Early post-operative intravenous tacrolimus in pediatric liver transplant recipients is not superior to oral tacrolimus.

Tarek Abd El Azeem, *Hideaki Okajima, Atsushi Yoshizawa, Eri Ogawa, Shinya Okamoto, Mohamed Osman, Yasser Saad El Din & Shinji Uemoto.* ***Assuit, Egypt.***

To control tacrolimus within suitable blood levels by per-oral (p.o.) administration in early period after liver transplantation (LT) is unstable. Intravenous administration (i.v.) with therapeutic drug monitoring has advantage to maintain tacrolimus blood levels in early period after transplantation. We aimed to compare the early results of i.v. with p.o. tacrolimus as a primary-immunosuppressant in pediatric patients undergoing LT. This retrospective study enrolled 75 children who underwent LT and received tacrolimus-steroid regimens as a primary-immunosuppressant between September 2011 and October 2015 at our institution. Thirty-five recipients received tacrolimus i.v. and 40 received tacrolimus p.o. Early results were evaluated and compared, including acute cellular rejection (ACR), Epstein-Barr virus (EBV), or cytomegalovirus (CMV) infection; renal adverse effects; and hospital stay. Comparisons of 90-day post-transplant results showed that the rates of overall viral (74% vs 40% p< 0.002), EBV (46% vs 17.5% p<0.008) and CMV (51% vs 30% p=0.05) infections were significantly higher in the i.v. than in the p.o. group. Neither regimen has any adverse effects on renal function. There were no between group differences in ACR incidence and severity, serum creatinine concentration and hospital stay. Patient and graft survival rates at 3 months and 1 year did not differ significantly between the two groups. Compared with p.o. treatment, i.v. administration of high tacrolimus concentration did not have beneficial post transplant effects on ACR incidence and severity, while increasing the incidence of viral infections in pediatric-LT.

Review of pediatric liver resections in a single center experience; Experiences and lessons learnt.

***Hesham Abd El Kader*. *Ain Shams, Egypt*.**

Background:

Liver resections for a variety of indications are common procedures in pediatric surgery. The goals for such a procedure are to achieve a resection that respects the anatomical considerations as possible with adequate safety margins together with vascular control and minimal bleeding. Several tips essentially learnt from the experience of performing hepatectomies for living donors in the context of a LDLT program, have made a difference.

Methods:

All liver resections performed by the Ain-Shams Pediatric Surgery Hepatobiliary team were retrospectively reviewed between March 2005 and April 2017.Data relating to basic demographics, indication for resection, methods of parenchymal transection, blood loss, hospital stay, morbidity, and mortality were collected.

Results:

Twenty-seven hepatectomies were performed during that period for children aged from 6 months to 13 years, 16 were males while 10 were females; nine had their hepatectomies done for malignant liver disease whereas the rest 18 cases had their resections for benign causes. We report 2 preoperative deaths due to uncontrolled bleeding and insufficiency of the liver remnant with liver failure, while the surgical morbidity included seven patients with billiard leaks, 5 patients with SSI and wound dehiscence, one patient had torsion of the remnant liver with congestion necessitated repositioning, while three patients had recurrence of the tumor one had transplantation with the other two having another successful resections. One patient underwent total hepatic vascular exclusion with sharp parenchymal transection, while the remaining patients underwent selective vascular inflow and outflow control using the Cavitron Ultra Sonic Aspirator and Harmonic Scalpel to divide the parenchyma.

Conclusion:

For a safe hepatectomy to be carried out, thorough familiarity of the hepatic segmental anatomy together with the various techniques for parenchymal transection and vascular control is paramount to minimize morbidity and blood loss.

Portal vein reconstruction using vein grafts in pediatric living donor liver transplantation: Current status.

Tarek Abd El Azeem, *Hideaki Okajima, Atsushi Yoshizawa, Tatsuya Okamoto.*
Assuit, Egypt.

Portal vein (PV) reconstruction is an important aspect of living donor liver transplantation (LDLT), with post-transplant outcomes depending on PV reconstruction methods. However, it is unclear whether the preferential selection of these techniques is dependent on pre-operative recipient characteristics. This retrospective study assessed whether preoperative recipient factors differed in pediatric patients who did and did not receive vein grafts (VGs) for PV reconstruction. Of 113pediatric patients who underwent LDLT from January 2010 to July 2015, 31 (27%) underwent PV reconstruction with VGs and the other 82 (73%) without VGs. The presence of collateral vessels ($p<0.0001$) and ascites ($p=0.02$); PV size ($p<0.001$), thrombosis ($p=0.01$) and the direction of flow ($p=0.01$), Child-Pugh class A versus B/C liver function ($p=0.01$), albumin concentration ($p=0.02$), primary diagnosis: biliary atresia vs non biliary atresia ($p=0.03$) and previous abdominal surgery ($p<0.005$) differed significantly in patients who did and did not receive VGs for PV reconstruction. PV complications, patients and graft survivals did not differ significantly in patients with and without VGs at one year follow- up. VGs should be harvested for recipients with pre-transplant hypoplastic PV, intense collaterals, hepatofugal flow, poor liver status or previous abdominal surgery.

Peptic Esophageal Stricture in children: A review of 6 years' experience.

Mohamed Moussa, *Khaled El Asmar, Mohamed Hisham & Mohamed Abd El Latif*. ***Ain Shams, Egypt***.

Background: Strictures of the esophagus in children may have multiple etiologies including congenital, inflammatory, infectious, caustic ingestion, and gastroesophageal reflux (peptic stricture [PS]).
Peptic esophageal stricture (PES) is a serious complication of gastroesophageal reflux disease (GERD) in childhood. The treatment of PES is still controversial, ranging from simple esophageal dilations to resection/anastomosis of the stenoticportion of the esophagus. In this study, we want to share our experience with 20 children with GERD and PES. The objective of this study is to evaluate our institutional experience and define the natural history and treatment outcomes.
Materials and methods: A retrospective review of clinical data obtained from children who underwent dilation and anti-reflux surgery for PES was performed from July 2012 till June 2018.
Results: A total of 20 patients were diagnosed with PES. Patients had age range from 2y till 13 years old at age of presentation. The clinical picture was dominated by weight loss in all patients and dysphagia in 90% of cases, hematemesis in 6 cases and melena in 2 cases. Medical treatment was given to all patients before intervention with range from 1m till 2 year with no improvement in all cases. Barium swallow showed hiatal hernia in 13 cases (65%). Esophageal strictures were located most commonly in the lower part of middle third of the esophagus (70%). Five Children (25%) with PES had a neurologic impairment.
90 % of cases required preoperative dilatations (median of 5.6 dilations &range 0-40 dilations) for PES. Anti-reflux surgery (Nissen Fundoplication) was performed in all patients via open approach in 80% of cases and laparoscopic in 20%. Post-operatively, 65% of patients required repeat esophageal dilation (median of 1.7 &range 1-13 dilatations). Patients were followed up for a period ranged from 2 m till 5 years.
Conclusion: GERD complicated by PES is an important condition affecting a significant number of children. Early and effective treatment of both stricture and GERD is required to improve the prognosis of this serious condition.
Patients with failed medical treatment of GERD should make a contrast study after 6 weeks to detect degree of reflux and presence of hiatus hernia. Persistent progressive weight loss and appearance of dysphagia in a known case of GERD should be an alarming sign.
Anti-reflux surgery is a must in cases with peptic stricture, it improve the outcome of most patients and decreases the necessity of frequent dilataions.

The Pattern of neonatal intestinal perforation in Upper Egypt.

Nezar Abo Halawa, *Mohamed Negm & Mohamed Fathi.* ***Qena, Egypt.***

Background/Purpose: Neonatal gastrointestinal perforation is one of the major problems facing pediatric surgeons. Although the outcomes of neonatal surgery have improved markedly over the past decade the mortality rates of neonates with NIP are still high ranging from 15-70%. The aim of this study was to evaluate the possible etiological factors, clinical findings and operative procedures of Neonatal gastrointestinal perforation in our locality.

Patients and methods: A retrospective study was done targeting all neonates with neonatal gastrointestinal perforation at Qena University Hospital and Minia University Hospital during the period from October 2014 to April 2017.

Results: A total of 34 neonates with neonatal gastrointestinal perforation were included in this study, 19 male (55.9 %) and 15 female (44.1 %). The average age at presentation was 15.8 days. Their birth weight ranged from 1500 – 3600 grams. The interval between presentation and surgical interference was 1- 6 days. Necrotizing enterocolitis was the commonest cause of neonatal intestinal perforation (16 cases), followed by iatrogenic (six cases). Hirschsprung`s disease (HSD) (five cases) {three cases iatrogenic and two cases spontaneous}, neglected Jejunoileal atresia (two cases), idiopathic perforation (one case), complicated meconium peritonitis (one case), intestinal volvulus (one case), neglected anorectal malformation (one case) Exomphalos with perforated Meckel's diverticulum (one case)

The commonest site of perforation was the colon (11 cases), followed by ileum (eight cases), rectum (five cases) .The main line of treatment in this study was the stoma (colostomy in 12 cases and ileostomy in 11 cases), primary closure was done in six cases. The overall mortality rate was 11 cases (32.4%). The main causes were related to mortality as follow: necrotizing enterocolitis (six cases), jejunoileal atresia (two cases), Eight cases died (40 %) out of 20 cases in which the interval between the presentation and interference were more than one

Conclusions: Neonatal intestinal perforation is still associated with high mortality rate in our institutes, delayed diagnosis is one of the most important causes of increase mortality, in the same way, increase interval between the presentation and interference may lead to increase mortality , in our locality the iatrogenic cause is relatively high which need good training of paramedical and nursing stuff for dealing with neonate as regard rectal manipulation , also good communication between pediatrician and pediatric surgeon is need to increase clinical experience of diagnosis also rapid transport of neonates is need to decrease time between presentation and interference

Surgical management of choledochal cyst (Mansoura experience)

Ahmed Adawy, *Mostafa El Ayyouti, Sherif Abd El Maksoud, Mohamed El Sherbiny, Radi El Sherbini & Adham El Saied.* ***Mansoura, Egypt***.

Introduction

Choledochal cyst (CC) is a congenital dilatation of the biliary tract, most commonly the choledochus. According to Todani's classification type I & type vIa account for more than 90% of cases. Excision has been established as standard management of CC.

Aim of the work

To compare the outcome of the two most commonly performed methods of biliary reconstruction after excision of CC: hepaticoduodenostomy (HD) and Roux-en-Y hepaticojejunostomy (HJ).

Patients and methods

All patients diagnosed with CC and admitted in pediatric surgery department at Mansoura university children hospital, over the last three years form May 2015 to May 2018, were included in a retrospective cohort study to assess the outcome of the two biliary drainage methods: HD and HJ. 18 patients with CC were included in the study. One patient was excluded, despite proved pathologically to be Caroli disease (Type V CC), being misdiagnosed as simple hepatic cyst with no surgical biliary reconstruction. Infants presented with abdominal mass and jaundice, while children presented mainly by jaundice and abdominal pain. Diagnosis was confirmed by US and MRCP. Data was collected from patient files. The assessment criteria includes: operative time, length of hospital stay, postoperative complications & reoperation rate. Outcome data were compared using student's t-test and Mann-Whitney test.

Results

17% of patients presented during infancy, while 83% of patients presented during childhood (range, 2 to 12.5 years; median, 6 years). Male to female ratio (1:2.5). Type Ia to type VIa ratio (1:1). No patients with type II or type III CC. Only one patient with Caroli disease (Type V CC) and was excluded from the study. Biliary reconstruction was performed by HD in 7 patients (39%) and by HJ in the other 11 patients (61%) according to surgeon preference. HD group had relatively shorter operative time (2.8 vs 3.9 hours for HJ, P = .013), slightly shorter hospital stay (6.5 days for HD vs 8.5 days for HJ, P = .12). Ascending cholangitis was not detected in either group. Difference of other complications was statistically insignificant (P>0.05).

Conclusion

HD is a feasible alternative to HJ biliary anastomosis, either technique can be used according to surgeon preference and own experience.

Keywords: choledochal cyst; hepaticoduodenostomy; hepaticojejunostomy.

Effect of Mitrofanoff on renal function & our experience with SILS assisted Mitrofanoff procedure without bladder augmentation.

M Attar, E Raboe, A Alsaggaf, A Zeinelabdeen, M Zydan, A Alawi, M Fayez, Y Owiwi, A Atta, Sh Al Ghamdi, H Nasser, A Ghallab & S Al Razgan. ***KFAFH Jeddah, Saudi Arabia.***

Aim: To evaluate the efficacy of Mitrofanoff procedure in terms of improved renal function, reduced hydronephrosis and recurrent urinary tract infection (RUTI)

Patients & Methods: Retrospective review of all patients on clean intermittent catheterization (CIC) with Mitrofanoff were studied from 2007 to 2017. Procedures options were Mitrofanoff alone in 11patients, Mitrofanoff plus bladder augmentation in 5 patients, and Mitrofanoff + bladder augmentation + other procedures in 10 patients. The outcome of CIC on serum urea and creatinine, glomerular filtration rate (GFR), severity of hydronephrosis and frequency of UTI was evaluated. Mean follow up was 6 years range 1-16 years

Results: Twenty six patients were evaluated in this study. Fifteen boys and eleven girls. One was missed from follow up and one has chronic kidney disease with GFR**<**15 ml/min/1.73m2 from start. The indications for Mitrofanoff were obstructive uropathy, meningomyelocele, Prune Belly syndrome and bladder extrophy. Fourteen patients have good results with decreased or stabilized level of serum urea and creatinine, improvement of GFR in patients with GFR >30ml/min/1.73m2. No change in patients with GFR >15ml/min/1,73m2. Improvements of hydronephrosis especially in patients with moderate to severe degree was confirmed by US. The frequency of UTI was decreased in the follow up period.

Conclusion: Mitrofanoff principle can protect upper urinary tract in the long term. One patient with GFR< 30 deteriorated after one year of follow up, so early diagnosis, assessment of bladder dysfunction and early intervention is recommended. Although the sample is small, most of the patients demonstrated improvement or stabilization in renal status. Although bladder augmentation were done in half of the patients but still it wouldn't affect the outcome alone without CIC. Further prospective research on continent urinary diversion with large sample size focusing on renal outcome in children and the best measure for follow up are recommended.

Buried penis in children: Incidence, associated anomalies & outcome of surgical treatment.

Ahmed El Hattab, *Hesham Sheir, Adham El Saied & Mohamed El Ghazaly.*
Mansoura, Egypt.

Background/purpose:
Buried penis signifies a congenital anomaly in which inadequate appearance of the penis to extend from the abdominal wall as a distinct organ may be of a great concern to the parents and family. Affected children are brought to surgeons' attention for cosmetic reasons, difficulty to maintain proper hygiene and for circumcision revision. The literature is deficient in reporting the incidence of buried penis, with a controversy in the optimal timing of the surgical correction that includes many different techniques. In this study; the incidence, associated anomalies and outcome after surgical management of buried penis will be reported.

Patients and Methods:
During the period from January to June 2016; male infants and children presented to outpatient clinic at Mansoura University Children's Hospital were examined to determine the condition of their penises. Cases of buried penis were selected, their demographic and clinical data were collected and outcome of surgical repair of such cases was reported. Surgical repair was done through suturing the prepubic fascia to the tunica albuginea proximally at 10, 12, and 2 o'clock positions using 4-0 polydioxanone (PDS ®). Also penile skin was attached to the penile shaft by longitudinally placed sutures at 10, 12, 2 o'clock positions dorsally and 5 and 7 o'clock positions ventrally passing at penile base through skin crease, tunica albuginea and then out again with a 2 mm bridge between sites of entry and exit using 4-0 or 5-0 polyglactin (Coated Vicryl®) sutures.

Results:
Among 2958 examined boys; Buried penis was observed in 49 cases (1.7%). Their age at presentation ranged from 2 to 132 months (median 21 months). Associated anomalies were detected in 19 (38.8%) cases. 32 (65%) cases were circumcised and 17 (35%) cases were not (age at circumcision ranged from 2 to 36 months, median= 4 months). The main presentations were parent anxiety about penile appearance in 15 cases (30.6%), for circumcision in 15 cases (30.6%) and referral for re-circumcision in 15 cases (30.6%). Stretched penile length (SPL) ranged from 3.5 to 7.3 cm (mean 5.28 cm). Visible penile length (VPL) without stretch ranged from 0.5 to 3.7 cm (mean 2.4 cm). Out of 49 cases with buried penis; 12 cases were planned for penoplasty. Postoperative visible penile length ranged from 3.2 to 4.7 cm (mean 4.05 cm). The increase in the visible penile length in all 12 cases ranged from 2.7 cm to 3.3 cm (mean increase is 2.91 cm). The difference between preoperative and postoperative VPL was statistically significant ($P < 0.001$). Post-operative complications were reported in 4 cases (33.3%) that included: Wound infection (8.3%), penile torsion (16.7%), redundant mucosal collar (8.3%), and partial recurrent concealment (8.3%). Degree of parents' and surgeon's satisfaction was satisfactory in > 90% of cases. Period of follow up ranged from 11 to 16 months (mean 13.2 months).

Conclusion:

The incidence of buried penis is approximately 1.7 % of male children and associated anomalies were reported in 33% of cases. Penoplasty after the age of 4 years gives a satisfactory results for both patients/parents and surgeons with a good cosmetic and functional outcome.

Keywords:

Buried penis, penoplasty.

Delayed presentation & management of Müllerian duct anomalies.

Essam El Halaby. ***Tanta, Egypt.***

Developmental anomalies of the Müllerian duct system represent some of the most fascinating disorders that pediatric surgeons and /or obstetricians and gynecologists may come across. Müllerian duct anomalies range from complete Müllerian aplasia to vaginal and uterine duplications.

Müllerian anomalies are frequently asymptomatic and are often missed in routine gynecological examinations. Nevertheless, a history of pelvic pain following menarche, dysmenorrhea, and an increase in abdominal volume are complaints suggestive of uterine anomalies. In addition, primary amenorhea and changes to menstrual flows may be present. Müllerian anomalies can present in infancy and early and childhood when it is associated with anorectal malformations, obstructed urinary symptoms, hydrometrocolpos or Disorders of sex development.

Objectives: to highlight difficulties in the diagnosis and treatment of patient with Müllerian anomalies

Material and Methods: retrospective study of all patients with delayed presentation of Müllerian anomalies treated during the past two decades. Patients with associated DSD or anorectal malformation were not included in this review

Results: This review included 25 patients with various various degrees of Müllerian anomalies. Their ages ranged from 12-22 years. 16 patients required sigmoid colon vaginoplasty. 5 patients treated by anterior saggital trans rectal approach (ASTRA), 3 patients treated by combined transperineal and abdominal approach, one patient with thick hymen treated by opening the obstructed hymen. Partial loss of sigmoid graft occurred in one patients. All other patients are doing well. normal sexual life was reported by 10 patents who were married.

Conclusion: Müllerian anomalies consist of a wide range of defects. The management must be individual, taking anatomical and clinical characteristics into consideration, as well as the patient's preference. Sigmoid vaginoplasty is associated with excellent functional results.

Müllerian remnants associated with severe hypospadias different presentations, management & surgical approaches.

Nader Nassif. ***Ain Shams, Egypt.***

INTRODUCTION: The prostatic utricle is the homologue of the uterus and upper vagina. It is derived from the fused ends of the Mullerian duct. The incidence of prostatic utricle cysts is 11 to 14% in association with hypospadias or intersex anomalies and increases up to 50% in the presence of perineal hypospadias. Diagnosis should be always thought of when **a patient with severe hypospadias** complains of repeated UTI, post voiding dribbling or urinary retention especially post hypospadias repair . When disorder of sexual differentiation is suspected in a case of hypospadias e.g., associated undescended testis or microphallus. when there is difficulty inserting urethral catheter or when a mass is felt on digital rectal examination.

A pelvic or transrectal ultrasound will demonstrate the fluid filled cavity. An MR study using an endorectal coil is useful to delineate the cyst from the other pelvic structures. Genitogram and cystoscope can be done to assess suspected cases.

The decision is sometimes difficult, when to follow up the patient, when to interfere and what is the proper timing.

MATERIALS AND METHODS: 28 cases of severe hypospadias were included in this study.

RESULTS: 28 patients of severe hypospadias were included, 11 had mullerian remnants, one presented with urinary retention post hypospadias repair, 10 were proven by cystoscopy or genitogram pre-hypospadias repair, 6 were managed conservatively with follow up. 5 were excised, four via transtrigonal approach and in one perineal mucosectomy was done. Successful results were achieved in all five cases with good accessibility, easy dissection, with no significant post-operative complications and rapid recovery.

CONCLUSION: Mullerian remnant should always be suspected in all forms of severe hypospadias, thorough examination and investigations should be done to decide the proper way of management whether excision or close follow-up.

Distal Hypospadias Repair With or Without PRP is There a Difference?

Abd El Aziz Yehya, *Samir Gouda & Ibrahim Gamaa.* ***Al Azhar, Egypt.***

Objective: To determine the value of Platelet rich plasma (PRP) applied during primary repair of distal hypospadias with Snodgrass technique in contrast to other group without PRP.

Patients and methods: This was a prospective randomized study comprising 180 boys (age range 1–5 years) with primary sub-coronal, distal- and mid-penile hypospadias who underwent repair from October 2011 to December 2016 in a tertiary care hospital. Boys with glandular, recurrent, severe chordee and proximal hypospadias were excluded from the study. The boys were prospectively randomized into two groups: Group A, comprised 90 boys who underwent Snodgrass TIP urethroplasty with PRP coverage layer and Group B, comprised 90 boys who underwent Snodgrass TIP urethroplasty without PRP. Outcomes were assessed in terms of complication rates, function results and cosmetic appearance during follow-up.

Results: There was no significant difference in the occurrence of complications between the groups. There were 36 complications, with 12 occurring in Group, A and24 in Group. Urethrocutaneous fistula was the most common complication in both groups (9 in Group A and 12 in Group B), the fistulae were <2 mm in 9 patients and 3–5 mm in the remaining 12. Partial glans dehiscence occurred in one case of group A, while 4 patients in group B. No patient in group A, had superficial wound infection, compared to 6 patients in group B .One case of meatal stenosis and urethral stricture in each group respectively, all of which were managed conservatively. The resultant urinary stream was single and good in 144 patients of both groups.

Conclusions: PRP sheet applied as a coverage layer is safe, effective and low coast. It is an alternative coverage for hypospadias repair especially in absence of healthy layer for covering and may help in decreasing of postoperative complications thus the choice of technique depends on surgeon preference.

Keywords: Tubularized Incised Plate ,Urethroplasty, Distal Hypospadias , PRP.

The use of an autologous platelet-rich fibrin membrane in urethroplasty for cases of distal hypospadias fistulas: A randomized control study.

Mahmoud Tarek *& Hesham El Saket.* ***Cairo, Egypt.***

Key words:

Hypospadias, Urethrocutaneous fistula, Membrane, Healing power, Fibrin, recurrent fistula, coverage layer.

Abstract:

Urethrocutaneous fistula (UCF) is the most common complication occurring after hypospadias repair. Despite precise precautions and different surgical procedures with various types of covering layers, fistula recurrence is still high. Different coverings interposed between the skin and repaired fistula and even two layers covering is applied but occurrence of urethrocutaneous fistula cannot be eliminated. Beside several local tissue grafts, autologous and homologous fibrin sealants are used to prevent UCF. Platelet rich fibrin (PRF) is known as an autologous source of growth factors obtained from the sera of the patient. PRF promote healing power and has a role in minimizing infection.

We present a prospective randomized control study in two groups of patients with distal fistula after hypospadias repair, the first group is the control one in which tunica vaginalis used for coverage, the second group is the group of study, which subjected to use of PRF as a first coverage layer over repair.

The results showed marked improvement after using PRF with incidence of fistula recurrence in only one patient from 15 patient (6.6%), in the other hand the control group showed higher incidence rate as 4 patient from 18 patient experienced recurrent fistula (22.2%).

PRF is recommended to be applied with all surgeons familial with hypospadias surgeries not only in DE novo cases but also in fistula cases.

Bladder exstrophy repair, Al Qassimi women's & children's hospital - 10 years experience.

***Mohamed Hassan*. Sharja, UAE.**

The presentation will elaborate on our experience for Bladder extrophy repair in the last 10 years.

The demographics of the patients, surgical repair, follow up and the current patients condition will be demonstrated.

Needlescoplc assisted disconnection of the hernial sac in the treatment of pediatric inguinal hernia; A novel technique.

Rafik Shalaby, *Adham El Saied, Mohamad Shahin & Ibrahim Elsayaa.* ***Al Azhar, Egypt.***

Abstract: There are many techniques available for laparoscopic hernia repair in pediatrics. But, there are growing support for laparoscopic disconnection of the hernia sac with either closure of the peritoneum or leaving it Opened. Disconnection of the hernia sac is an important step in preventing both postoperative recurrence of hernia and hydrocele formation with no added risk of injury to the vas and vessels. It mimics what happen in conventional open herniotomy with the added advantages of laparoscopy. However, most reported cases done by laparoscopic disconnection used 5-mm 0t 3-mm instruments. Herein, in this study we used needleless [Suture Gtaspet Device [Mediflex Surgical, 250 Gibbs Rd. Islandia, NY 11749, New York, USA] a home-made microdiathermy probe and Epidural Needle] for the first time for both disconnection of the hernia sac and closure of the peritoneum around internal inguinal ring [IIR] and even suturing of the muscular arch to iliopubic tract. We went through the English literatures and we could not find any report about needlescopic disconnection of the hernia sac and closure of the peritoneum or needlescopic narrowing of the IIR.

The details of the technique and the preliminary results will be presented as an oral presentation.

Laparoscopic repair of pediatric inguinal hernia: Disconnection of the hernial sac versus disconnection & peritoneal closure.

Mostafa El Sayed, *Akram Elbatarny, Mohammad Khair-Allah, & Amel Hashish.*
Tanta, Egypt.

Background/ Purpose: Several techniques were described for laparoscopic treatment of pediatric inguinal hernia (PIH). Some authors emphasized the importance of disconnecting the sac, to create a scar, and to close the peritoneum to mimic the open approach. Others stated that peritoneal disconnection alone is enough for treatment of PIH regardless the size of the internal ring. In this study we compare the short term results of laparoscopic disconnection of PIH sac versus disconnection and peritoneal closure as regards feasibility, operative details, postoperative complications and recurrence rate.

Patients and Methods: This prospective randomized clinical study was carried out in Pediatric Surgery Unit, Tanta University Hospitals, during the period from March 2016 to March 2017,on 33 patients with 40 pediatric inguinal hernias, with age from 1- 24 months; patients were randomly divided into 2 groups. **Group A:** subjected to laparoscopic disconnection of the hernia sac without closure of peritoneum over internal ring. **Group B:** subjected to laparoscopic disconnection of the hernia the sac with closure of peritoneum over internal ring. Both groups were compared regarding the operative details, including complications and conversion, postoperative complications and recurrence.

Results: Group A included 20hernias in 15 patients, while Group B included 20hernias in 19 patients. The age ranged from 1-21 months. The male: female ratio was 7.5:1. In Group A, the mean operative time was34.6 ± SD 3.71 min and 39.4 ± SD 4.39min for unilateral and bilateral case respectively, while in Group B, it was 45.1 ± SD 4.87min for unilateral cases and 65 min. for 1 bilateral case. The operative time was significantly shorter in group A than group B for unilateral cases ($P < 0.01$). There was no conversion and no intraoperative complications. No recurrences occurred in Group A while 3 recurrences were encountered in Group B. All recurrences occurred in hernia with internal ring diameter > 10 mm. However the difference was statistically insignificant between the two groups.

Conclusion: Laparoscopic treatment of PIH can be done safely with both techniques. Laparoscopy offers many advantages over the open technique specially visualization of both sides, magnification and minimal manipulation of cord structures. Both laparoscopic sac disconnection with internal ring closure and sac disconnection only are effective for treatment of PIH however the latter technique is not recommended for cases with internal ring diameter> 10 mm. Larger numbers from different centers are needed to validate theses results.

Key words: laparoscopic, pediatric, hernia repair,sac disconnection.

Pneumovesicoscopic versus laparoscopic approach for lower ureteric congenital anomalies in infants & children.

Hesham El Safoury*. *Ain Shams & Abu Dhabi, UAE.

INTRODUCTION

Minimal invasive surgery (MIS) approach to lower ureteric anomalies is very appealing due to the
advantage of magnification and reaching deep pelvic structures without need for the usual
conventional large incisions

M&M

Over the last 3 years 88 units (ureters) where managed minimal invasively, either laparoscopic extravesical or the penumovesicoscopic transvesical approach. The underlying pathology included
refluxing , obstructed or obstructed refluxing ureters. for unilateral refluxing ureters an extravesical transabdominal approach was used . for bilateral cases a pneumovesicoscopic transvesical approach was used . data collected included the operative time , outcome and complications

Results

Number 88 ureters , operative time (range from 120 to 280 min), follow up (KUB US AND MCUG) , recurrence (2 cases), stenosis none.

Conclusion :

laparoscopic extravesical or the penumovesicoscopic transvesical approach to lower ureteric
congenital anomalies is a very attractive , safe and feasible . The success rate is very similar to open conventional approach . The operative time is comparable , however the MIS approach has an advantage of sparing anterior bladder wall incision and a anterior abdominal wall incision .

SILS Cholycystectomy.

Enaam Raboe, *A Ghallab, A Alsaggaf, A Zein, M Fayez, Y Owiwi, A Atta, Z Al Nefaie & Sh. Alghamdi.* ***KFAFH, Jeddah, Saudi Arabia.***

Introduction: Minimally invasive techniques have revolutionised surgical treatment. Few centers worldwide have advanced SILS for pediatric age group. Up to our knowledge there is no study comparing operative time of SILS/conventional chlocystectomy.

Aims: To determine the feasibility, safety, and expediency of SILS cholycystectomy in pediatric patients. To highlight the difficulties in this technique and discuss our strategies to address these issues and compare it with other published series.

Material & Methods: Retrospective study of all patients operated with SILS cholecystectomy from April, 2011 to May, 2018. Age of the patients ranged from 6 to 16 years. Covidien ® port was used in all cases. Articulating and straight regular instruments were used in the procedures.

Results: 48 patients under went SILS cholycystectomy over 7 years. One extra port was needed in 2 patients in the beginning of the series. 4 procedures were done simultaneously, 3 splenectomies, one appendectomy and one herniotomy. No conversion was needed. No wound infection. Mean operative time is 40 min ± 20 depends on the operator's skill and it is comparable with conventional technique

Conclusion: SILS cholycystectomy is safe, feasible and more cosmetic with almost invisible scar than conventional. More than one procedure could be done at the same time. The confusion of crossing image will be adapted after the first 10-15 min. Operative time is comparable with conventional technique.

Keywords: SILS, Cholecystectomy, Single port.

Bilateral orchidopexies: Synchronous or metachronous? Departmental review & survey of BAPS & BAPU members.

Ibrahim Mostafa, *Mohamed Shalaby & Mark Woodward.* ***Bristol, UK.***

Background/Aim: Approximately 20% of undescended testes (UDT) are bilateral. It is unclear whether bilateral orchidopexy (BO) should be undertaken synchronously (SBO) or metachronously (MBO). Our aim was to investigate current UK practice and the complications of SBO vs MBO.
Materials& Methods: Following approval of BAPS and BAPU ethics committee, a survey was circulated to UK Consultant paediatric surgeons and paediatric urologists regarding practice. A departmental retrospective review was additionally carried out for patients undergoing BO between 2005 and 2017.
Results: Forty-three Consultant surgeons from 20 centers completed the survey. Overall, SBO was preferred by 70% for bilateral palpable UDT versus 30% for bilateral impalpable UDT. When one side was palpable and the other impalpable, 70% preferred SBO. Paediatric urologists were significantly more likely to undertake SBO than paediatric general surgeons.
188 patients (376 testicular units)were identified who had undergone BO with a median follow up of 9 months. 144/188 (76.6%) underwent SBO while 44 had MBO. SBO was financially advantageous by comparison to MBO as a 2nd operation was avoided, and treatment was completed 6 months more quickly. There was no statistical difference in the complication rate between the two groups (7.6% in SBO vs 9.1% in MBO).

Conclusions: The majority of UK surgeons, in particular paediatric urologists, favor SBO. In addition, SBO offers a reduction in cost, more rapid completion of treatment and is not associated with additional complications by comparison to MBO. We recommend SBO to be standard practice for bilateral UDT whenever possible.

Outcome of fecal continence after pure trans- anal pull through versus laparoscopic-assisted in management of Hirschsprung's Disease

Abd El Aziz Yehya, *Magid Ismail, Samir Gouda & Ibrahim Gamaan.* ***Al Azhar, Egypt.***

Objective: to evaluate fecal continence after laparoscopic assisted and trans-anal endo-rectal pull-through for recto-sigmoid Hirschsprung's disease. **Patients and Methods:** This prospective study was performed on 40 pediatric patients with Hirschsprung's disease .from July 2013 to July 2016. The patients were divided into two groups; group (A); 20 cases underwent laparoscopic assisted trans-anal endo-rectal pull-through and group (B); 20 cases underwent pure trans-anal endo-rectal pull-through TERPT. Demographic, clinical data, preoperative investigations, operative records, postoperative outcome were studied. A continence evaluation questionnaire (CEQ, max score = 10) assessing frequency of motions, severity of staining, severity of perianal erosions, anal shape, and requirement for medications was used. Severity of staining was graded as none = 2, occasional = 1.5, often = 1, always =0. (EMG) and magnetic resonance imaging (MRI) were also used in follow-up. **Results**: After one year of follow up : group A (total patient 20) continence score was normal in 10 (50%), good in 9 (45 %), fair in 1 (5%), poor in 0 (0%); while group B (total patient 20)continence score was normal in 5 (25 %), good in 14 (70%), fair in 1 (5%), poor in 0(0%); however, staining/soiling in group A was present in 2 (occasional staining in 2 cases, staining in 0, staining always in 0, and soiling in 0); while group B staining/soiling was present in 2(occasional staining in 2 cases, staining in 0, staining always in 0, and soiling in 0). We found statistically significant difference between groups according to continence score in after 1month & 6 months and clinically not statically significance after 12 months. **Conclusion:** Laparoscopically assisted trans-anal endo-rectal pull through is less invasive and can provide a better clinical outcome compared with trans-anal endo-rectal pull through as regard fecal continence and stooling function.

Keywords: fecal continence, Hirschsprung's disease, Laparoscopy and Trans-anal endo-rectal pull-through

A new proposed scoring for anorectal continence and constipation in children.

Sameh Shehata. ***Alexandria, Egypt.***

Background:
To evaluate bowel function in patients with anorectal malformations (ARM) comparing existing scoring systems, Rintala, Holschneider, Pena, and Crickenbeck. The aim is to propose anew scoring system that is easy to apply and avoids the drawbacks of previous classifications.

Materials and methods
The proposed scoring system incorporates the clinical features: frequency of defecation, stool consistency and the ability to hold / control stools together with radiological findings on postoperative contrast enema. The scoring system was applied on control group with normal bowel function as well as retrospective review of postoperative cases of anorectal malformations during 2010-2016 in pediatric surgery dept. Alexandria university after a minimum 1 year postoperatively.

Results:
The control group had a mean score of 2.4 +/- 0.7 (Normal -3/+3)
12 patients with recto-bladder neck fistula -8.4 (moderate soiling)
24 patients with Recto prostatic fistula -5.4 (mild soiling)
15 patients with Recto bulbar fistula -4.6 (Mild soiling)
34 patients with Vestibular fistula + 2.2 (normal continence)
14 patients with Recto perineal fistula +8.3 (moderate constipation)
The scoring system showed high correlation with clinical impression.

Conclusion.
The new proposed classification is easy to apply, considers constipation and incontinence separately and it incorporates the radiological findings on contrast enema. It can be used to assess and compare postoperative results for cases of anorectal malformations and to assess patients with functional constipation.

End pouch Pull-through it is good alternative to PSARP or not.

Mahmoud Mostafa. ***Assuit, Egypt***

There is no debate that PSARP is the golden surgical procedure for treatment of HIA since many years; it is done in three stages, colostomy at time of birth, then posterior sagittal anorectoplasty and colostomy closure.
Many cases of HIA have high rectal pouch (above pelvic floor with or without fistula) and it is difficult to perform PSARP and need another abdominal incision for mobilization of the colon to complete PSARP procedure and this is risk of Failure of procedure.
In our pediatric surgical unit of Assiut University Hospitals we perform new technique inform of abdominal Endo-pouch pull-through from start For HIA cases with High Pouch(above pelvic floor with or without fistula) and so we do only two stages for management and revealed in Good results concerning continence and burden on the patients.

Trans-sphincter anorectoplasty (TSARP) for recto vestibular fistula in females.

Mohamed Abd El Kader Osman, ***Assuit, Egypt***

Introduction: Imperforate anus with recto vestibular fistula is the most common form of the imperforate anus in females and is an intermediate type of this disease, which is treated surgically(2). Generally, patients with vestibular fistulas have good functional results when treated by fistula transposition (8).

Materials and methods: This was a prospective study did from January 2016 to January 2017. We included all female with age range from (25 days -12years old) diagnosed as a rectovestibular fistula (RVF) operated by single stage TSARP, at pediatric surgery units of Assiut and Aswan university hospitals. The functional results, cosmetic appearance and postoperative complication for each case after treatment were evaluated in patients for 3-6 months.

Results: The total numbers of cases are 22 cases from rural areas of Upper Egypt, (36.36%) of patient's fathers and mothers are relatives and have associated anomalies. (50%) of cases are complaining of recurrent attack of constipation. (45.5%) of cases developed wound infection at the neonatal site. 7 cases are now more than 3years old, 6 of those 7 cases achieved voluntary bowel control and toilet trained and have good (4-5 points) wing spread score. One case less than 3 years old also achieved voluntary bowel control and toilet trained and has good (5 points) wing spread score.

Conclusion: Trans-sphincter anorectoplasty (TSARP) is easy to perform with reasonable operative time, good cosmetic and functional outcome. Separation of the rectum from the posterior wall of the vagina is the most delicate step of the operation, takes place under direct vision. Constipation is an essential problem in patients that can be managed by laxatives. Meticulous post-operative wound care is essential.

Botulinum B versus myotomy in managing obstructive symptoms following Hirschsprung's disease repair.

Ahmed B. Radwan, *Ahmed Abd El Gawad, Ayman Al Baghdady & Ashraf Al Saeed.* ***Ain Shams, Egypt.***

Background: Although most children with Hirschsprung`s disease (HSD) ultimately do well, many experience a variety of ongoing problems after pull-through surgery. The obstructive symptoms are the most common, which may take the form of abdominal distension, bloating, borborygmi, vomiting, or ongoing severe constipation. The 5 major reasons for persistent obstructive symptoms following a pull-through are mechanical obstruction, recurrent or acquired aganglionosis, disorder of motility in the proximal colon or small bowel, internal sphincter achalasia, or functional megacolon caused by stool holding behavior. Regarding the last 2 causes, may options for treatment are available, among them: botulinum toxin injection to chemically relax smooth muscle or surgical incision of the anal sphincter (Myotomy or Myectomy).

Patients and methods: This prospective randomized study was started in August 2017.This study was conducted in Pediatric Surgery Department, Ain Shams University hospitals, on 30 pediatric patients with obstructive symptoms after surgical treatment of Hirschsprung's disease. Patients were divided into 2 groups (group A: with anal sphincter myomectomy, group B: with Botulinum toxin injection). All patients were submitted to an obstructive symptoms questionnaire (OBS) adopted based what was published by El-Sawaf et al in 2007 before treatment, at 1month & 3 months postoperative.

Results: Both groups were comparable as regard the sex distribution (group A: 11 males, group B: 10 males), and mean age at referral (group A: 6.87 ±2.56, group B: 6.07 ± 2 .79 years), and the type of surgical procedure for the number of patients in each group (group A: Duhammel 6, Swenson 5, Soave 4; group B:: Duhammel10, Swenson 3, Soave 2). The mean ± SD patient's OBS score was 4.13 ±0.92 (range 3 – 6) in the group A, while it was 4.07 ±0.88 (range 3 – 6) in the group B. The mean ± SD patient's OBS score was 2.27 ± 1.53 (range 1 – 6) in the group A, while it was 2.07 ±1.33 (range 1 – 6) in the group B. There was no statistically significant difference between the two groups as regards OBS score at 1 month and 3 months (p-value=0.810)

Conclusion: at the short term follow up, both botulinum toxin injection and surgical incision of the anal sphincter (Myectomy) provides an almost equal effect in improving the obstructive symptoms following Hirschsprung`s disease surgery due to internal anal sphincter achalasia or functional megacolon.

KEYWORDS: Hirschsprung`s disease; constipation; botulinum toxin, anal sphincter myotomy, anal sphincter myomectomy.

Neonatal management of hydrocolpos: 15 years' experience.

Mohamed Moussa, *Amr Zaki, Mohamed Saeda & Sameh A. Hay.* ***Ain Shams, Egypt****.*

Abstract:

Background: hydrocolpos may be due to common urogenital sinus, vaginal atresia or high cloacal anomalies. The definitive management differs from center to center, but in the majority initial vaginostomy or vesicostomy is done followed later by vaginoplasty.

Materials and methods: A total of forty one girls with hydrocolpos were treated in the neonatal period during the last 15 years. 32 of them had one stage abdomino- vestibular vaginoplasty. Through pfanasteil lower abdominal incision, the distended vagina incised transversely in its lowermost part, and after drainage of its contents, a finger was introduced pushing the vaginal base down into the vestibule behind the common channel where the pushed vagina was retrieved and sutured to the edge of the incision of the vestibule.

The other 9 cases underwent neonatal vaginostomy (associated with vesicostomy in 3 cases of them). Vaginostomy was done though lower abdominal incision then opening the distended vagina then fixation to anterior abdominal wall with placement of a wide tube.

Results: out of the 32 cases who had one stage abdomino- vestibular vaginoplasty, 29 had excellent results; all had good size vaginal introitus located in the vestibule and 8 out the 29 girls had regular menses and with normal urinary continence. Three girls had complication; one had vaginal urinary leakage treated by surgical closure through perineal approach and 2 had severe stenosis treated surgically and were kept on regular dilatation for 6 month after correction with good results.

The 9 cases with vaginostomy, 2 died of sepsis, 3 had recurrence due to narrowing of the opening which needed redo operation in two of them and regular dilatation in one case, 2 cases lost to follow up and the other two cases went fine with no evident complications. A staged vaginoplasty was done in the five cases around age of 6m-1y with acceptable outcome.

Conclusion: neonatal one stage surgical treatment of hydrocolpos avoid staged procedure and the need for vaginostomy or vesicostomy with their subsequent complications i.e. vaginal adhesion or bladder dysfunction from long term diversion.

Abdomino-vestibular vaginoplasty is an excellent technique for neonatal management as it give a good access to locate the vagina perfectly in the vestibule with good morphological and functional results

One-Stage Simultaneous Repair of Complete Cleft Lip and Palate: What to expect?

Wael Ghanem, *Ahmed Arafa & Mohamed Gadallah.* ***Ain Shams, Egypt***.

Throughout the history of cleft surgery, there has been debate concerning the optimal timing of surgical repair, and, in particular, the timing of cleft palate closure. The three main issues in this debate are the patient's safety attempting to minimize complications, the impact of the surgical process on midfacial growth and the impact of the timing on subsequent speech development. Probably the most common timing sequence adopted worldwide is to perform cleft lip repair at 3 months of age followed by cleft palate repair at around 9 months. We are convinced based on practice that both surgical protocols give rise to similar maxillofacial development outcomes regardless of the type of surgery, the 1-stage procedure offers several important advantages for the treatment of patients with UCLP. These include, exposure once to anesthesia and hospitalization minimizing the potential risks and psychologic stress for both child and parents. Second, less growth disturbance due to less scar tissue. Third, it's ideal for countries where the health system cannot afford multistage multidisciplinary treatment. The concept of "one-stage repair," or in other words, "simultaneous repair," is based on early repair of entire clefts of the child within the first 12 months, especially between 6 and 12 months, of life. According to this concept, cleft lip, palate, and alveolus are repaired in one surgical session simultaneously to obtain the best functional and developmental results.

Patients and methods:

Our study is composed of 20 patients with complete cleft lip and palate who underwent one-stage simultaneous complete closure at 3-4 months of old (Millard's Procedure for unilateral cases and Mulliken repair for bilateral cases plus Von Langenbeck palatoplasty for cleft palate.

Conclusion:

Based on our results, one stage cleft lip and palate is technically feasible with promising initial results and no significant post operative complications.

Safety and efficacy of sirolimus in patients with refractory vascular anomalies

Ahmed Abd El Haseeb **&** *Hesham Abd El Kader.* ***Ain Shams, Egypt****.*

Introduction:

Vascular anomalies are heterogeneous group of anomalies arising from blood and/or lymph vessels. The vast majority follow a benign course. However, other vascular tumors such as Kaposidorm Hemangioendotheliomas may be life threatening. Many lines of treatment has been described, however no single agent is always successful. It has been suggested that mTOR inhibitors such as sirolimus could be beneficial in treatment. Sirolimus directly inhibits mTOR via preventing downstream protein synthesis and subsequent cell proliferation and angiogenesis.

Material and method:

Twelve patients with different vascular malformations refractory to different modes of treatment presented to the vascular mal-formations clinic, pediatric surgery department, Ain-Shams University. Three patients suffered from Klipple-Trenuany Syndrome, 3 Kaposiform haemangioendothelioma (KHE), 2 Hereditary hemorrhagic telangiectasia (HHT), 2 Park's Weber syndrome and 2 Lymphatic malformations. The patients were clinically examined, available radiological reports reviewed and them and their caregivers were asked to fill the pediatric quality of life inventory version 4.0 (pedsQL Generic Core Scale). Then they were put on oral sirolimus 0.8 mg/m2 and then adjusted to achieve serum level 10-15 ng/ml. serum sirolimus level was measured every 3 months. Subjects were followed up prospectively and asked to fill the quality of life assessment form once more after 12 months of treatment.

Results:

Mean age of subjects was 7.9 years with female predominance (8/12). Mean duration of treatment was 14.6 months. All 12 patients significantly improved on sirolimus as regard quality of life and symptoms. Patient 2 with Klipple-traunery syndrome with recurrent severe bleeding per rectum and vagina had less attacks in frequency and severity. Patients 5 and 6 with hereditary hemorrhagic telangectasia with recurrent epistaxis requiring hospital admission and blood transfusion has not required transfusion now for 18 months and 3 years respectively.

Conclusion:

Sirolimus is a valid and safe option in treatment of refractory vascular malformations.

Cart related trauma in Pediatrics: Revision of 54 injured child in central Sudan

Suha Tewfiq, *Faisal Nugud, Omar Mohammed & Osman Taha*. ***Gezira, Sudan.***

Background: Many children are admitted to the National Centre of Paediatric Surgery (NCPS), Gezira State- Sudan because of Cart-related trauma(CRT), those children reside in informal settlements, where there is lack of water supply, so they use a donkey- drawn water cart.
Worldwide 78% of lethally injured children die before hospital arrival , demonstrating the need for effective injury prevention(1).
Objectives: To describe the mechanism of injury, demonstrate the epidemiological parameters of injury and to suggest preventive measures.
Design: hospital –based descriptive cross sectional prospective study involved all children admitted to the NCPS because of CRT Between June 2011 and June 2013.
Results: Between (June 2011 - June 2013), 54 pediatric patients were admitted to the NCPS with CRT, the median age was 9.6 yrs, 92% were males, 97% from rural areas and 3% from suburbs , the most frequent injury diagnosed was Abdominal injuries in 44 patients (81.4%), followed by chest injury(n=6) 11.1%, extremities injury n=3 (5.5%) and the least was head injury 1 patient (1.85%) and the overall mortality was 1.8%(n= 1) died on arrival to hospital because of severe head injury. The mechanism of trauma was demonstrated, the cart of class- I leaver system and the force causing the injury was calculated.
Conclusion: The study highlights the morbidity and mortality of Cart-related trauma in central Sudan, it also documents the usefulness of institutional trauma data base in identifying common traumatic injuries in paediatric, which is required for identifying appropriate public health measures and directing resources towards the prevention and management of trauma.

Highlighting the Role of Rhinoplasty in Nasal Deformity.

Wael Ghanem, *Mohamed Mostafa, Mohamed Hisham Soliman & Hazem Samir.*
Ain Shams, Egypt.

The cleft nasal deformity is a complex challenge in plastic surgery involving the skin, cartilage, mucosa, and skeletal platform. The appropriate approach has been extensively debated in literature as regards timing, technique, and extent of surgical intervention. An appreciation of the pathologic anatomy in unilateral and bilateral cleft noses is essential in achieving satisfactory aesthetic and functional results. Timing of cleft lip nasal surgery can be divided into primary, intermediate, and secondary repairs. Multiple studies have disproved the idea that early manipulation of the nasal cartilage interferes with growth.

Patients and methods:

Primary rhinoplasty at the time of primary cleft lip repair was performed on 50 patients between 1-3 months old. Intermediate rhinoplasty was performed on 10 patients before school entrance between 4 and 6 years of age. Secondary rhinoplasty was applied on 28 patients between 16 to 18 years old.

Conclusion

The cleft nasal deformity is a common problem that has both consistent and reliable findings, as well as distinctive nuances. The goals of primary rhinoplasty are to restore symmetry and reposition the nasal structures such that further growth will not exacerbate deformities. Intermediate rhinoplasty, although not always indicated, can be utilized before school age to help achieve greater symmetry and help alleviate future growth deformities. Secondary rhinoplasty is the best approach after nasal growth via an open technique to fully visualize the nasal structure. Cleft nasal deformity is a complicated problem that should be addressed during multiple stages of the patient's life.

Nutritional assessment of preoperative gastrointestinal pediatric surgical patients.

Hadeer Nasr Eldin, *Mostafa Gad, Wessam Mohamed, Nihal Al Koufy & Gamal El Tagy.* ***Cairo, Egypt.***

Back ground: Nutrition is momentous to maintain normal growth, development, and resistance to infection. A high incidence of malnutrition presents among pediatric surgical patients results in debilitating immunity and stress resistance contributing to the increased risk of post-operative complications and length of hospital stay. Pre-operative nutritional assessment is essential to identify patients with malnutrition through objective modalities including anthropometric measures and serum proteins levels, and subjective modalities including Subjective Global Nutritional Assessment (SGNA) and the $STRONG_{KIDS}$.

Objectives: Pre-operative nutritional assessment of pediatric surgical patients who had major elective gastrointestinal surgeries, and correlating the pre-operative nutritional status with the postoperative complications and hospital stay.

Methods: Seventy-five patients were assessed nutritionally preoperative through a structured questionnaire and the results were correlated to the postoperative complications and hospital stay.

Results: Pre-operative assessment revealed that37% of patients presented with low weight/age, while 23% with low length/age. Length/ age was significant correlated with postoperative complications and hospital stay. A significant change was detected in the post-operative nutritional status.

Conclusion: There is a high incidence of malnutrition among pediatric surgical patients. Length-for-age represented a valid measure positively correlated with post-operative complication and length of hospital stay. Triceps Skin Fold (TSF) and $STRONG_{Kids}$ are good methods to evaluate the nutritional status.

Key Words: Nutritional assessment, Malnutrition, Gastrointestinal surgeries, Pediatric surgery, surgical complications, Cairo University.

Usefulness of the Gastroschisis prognostic score (GPS) in assessing outcome in a low to middle income country.

Alaa Obeida, *Aly Shalaby, Dalia Khairy & Khaled Hussein.* ***Cairo, Egypt.***

Introduction: The Gastroschisis Prognostic Score (GPS) stratifies Gastroschisis cases through a visual score to assess their outcome. Assessment is within 6 hours of birth and includes bowel matting, necrosis, atresia and perforation. A composite score of 2 or more heralds a greater risk for morbidity and prolonged hospitalization. A score of 4 or more identifies an infant with an additional higher likelihood of mortality.
Purpose: To assess the usefulness of the GPS in predicting outcome of Gastroschisis cases admitted to our unit.
Methods: A prospective study over an eight-month duration. Additional variables assessed were: maternal, antenatal, patient, treatment, and postnatal complications.
Results: A total of 16 cases were studied. GPS score ranged from 0 to 6 in the studied cases. Six neonates were live discharges while the remaining ten cases died. Seven cases (43.75%) had a GPS score of zero, five cases (31.25%) had a score of one, two cases (12.5%) had a score of four and two cases (12.5%) had a score of six. The five cases (31.25%) with a GPS score of "1" had mild bowel matting. Two of them survived while the other three died. Two cases (12.5%) had a GPS score of "4". One had closed gastroschisis with bowel necrosis while the other had severe bowel matting. The former case died, while the latter survived. Two cases (12.5%) with a GPS score of "6" had jejunal atresia associated with severe bowel matting. Both cases died. The relationship between the GPS and outcome showed a strong negative correlation with a correlation coefficient of **(-0.985)**
Conclusion: The GPS has proven to be a good indicator of morbidity and mortality in a low income country setting. It is easy to interpret and to apply. The GPS will help tailor care, plan treatment and council parents appropriately.
Key Words: Gastroschisis, Abdominal wall defects, GPS Score, Low income country

Why Transanal Swenson's operation for Neonates with Hirschsprung's Disease?

Wesam Mohamed, *Ahmed Ezzat, Ali Shalaby & Khaled Kamel.* ***Cairo University, Egypt.***

Abstract

Hirschsprung's disease is one of the common diseases in neonatal and pediatric age groups. Different procedures have been used for treatment of Hirschsprung's disease including, Swenson, Soave and Duhamel procedures. Swenson's operation was thought to affect the urogenital nerves and structures. The purpose of this study is to evaluate the outcomes following transanal Swenson's operation in the neonatal period.

Methods

23neonates admitted at the surgical neonatal intensive care unit of the Cairo University Specialized Pediatric Hospital with clinical picture of Hirschsprung's disease. The diagnosis was confirmed radologically by contrast enema and histopathologically by rectal biopsy. Cases with long segment Hirschsprung's disease were excluded. The patients underwent transanal Swenson's operation. Intraoperative course and postoperative outcomes such as leak, pelvic abscess, soiling, peri anal excoriation, enterocolitis and constipation were evaluated.

Results

23 (17 males and 6females) patients underwent one stage transanal Swenson's operation. The age of patients ranged from 14-30days(mean =22days), the length of resected aganglionic colonic segment ranged from 11-25 cm (mean = 18cm). No intraoperative bleeding or blood transfusion occurred. Follow up period ranged from 3-9 months. No anastomotic leak, soiling or perianal excoriation occurred. Two (8 %) patients suffered from stricture, one of them responded to regular dilatation with Hegar dilators and the other was managed by surgical dilatation followed by application of Mitomycin C at the stricture site. Enterocolitis occurred in 3 (13%) patients. Three (13%) patients developed postoperative constipation that required laxatives.

Conclusion

Transanal Swenson's procedure can be performed in neonates with short segment Hirschsprung's disease with good outcomes.

Key words: Hirschsprung's disease –transanal Sewenson

Secondary rectal prolapse in pediatrics.

Menan Elsadek *& M Abd El-Baky Fahmy.* ***Al-Azhar Girls, Egypt.***

Introduction:

Rectal prolapse is a common disease in children, diagnosed mainly between ages 1-5 years, it may involve mucosa only (mucosal prolapse)and may involve all layers of the rectum (complete prolapse).

Review:

Most cases of rectal prolapse usually is a primary disease without obvious causes especially in tropical countries but some cases secondary to well known diseases such ascystic fibrosis which not common in tropical countries and neurological diseases such as spina bifida.

Conclusion:

In this study, we will present associated anomalies, diagnosis, and management of different forms of rectal prolapse in neonate and infants secondary to other uncommon congenital and acquired diseases, with literature review

Selection process for laparoscopic adrenalectomy in pediatric & adolescents.

Ahmed Elhaddad *& Holger Till.* ***Tanta, Egypt.***

ABSTRACT

Introduction: Guidelines for adrenalectomy poorly define the use of minimal invasive surgery in pediatric patients. Major reasons for such a lack of information include infrequency of adrenal lesions, wide pathologic spectrum, small body size and technical challenges with miniature instruments. For neuroblastoma (NB), the variable oncological potential, the "encasement" of surrounding structures, the necessity to sample lymph nodes and the risk for recurrence justify risk-adapted stratification of surgery. We present our experience with laparoscopic adrenalectomy based on a selection process for all adrenal masses taking the International Neuroblastoma Risk Group (INRG) Classification System and Image defined risk factors (IDRF) into account.

Aim: demonstrate our experience with laparoscopic adrenalectomy during the last two years.

Materials and Methods: This was a retrospective study of 6 pediatric patients with adrenal masses for whom adrenalectomies were performed at our institution in 2017 and 2018 (4 laparoscopic and two open). After thorough clinical, endocrinal, radiological, oncological evaluation, the patients were divided into laparoscopic or open group according to our protocol. Independent of the size all suspected benign lesions received laparoscopic surgery. NB were stratified according to INRG and MIS was offered primarily to L1 (GN maturing or GNB intermixed with no IDRF, negative MYCN amplification and 11q Aberration even there was vascular encasement). For L2 lesions neoadjuvant chemotherapy was started according to the biopsy and biology of the tumors followed by preoperative reevaluation (IDRF, MYCN amplification and 11q Aberration, surgical risk stratification): open surgery was performed for those who still had IDRF and was positive for MYCN amplification and 11q Aberration, however laparoscopic approach was done for those how became NO IDRF and were negative MYCN amplification and 11q Aberration. Metastatic disease that was amenable for local surgical control can benefit from MIS if they don't have IDRF but have a good biology of the tumor.

Results: IS group: Four RT laparoscopic adrenalectomies were performed with the patients age ranged (1.5 years-15 years), 3male and one female. Two cases presented with precocious puberty due to functional RT adrenal masses, one case with vague abdominal pain and the fourth case with accidental discovery. MRI have been done for all patients which revealed solid mass in three cases (average diameter 35 mm) and cystic mass in one case(70 mm diameter). All patients were operated in the supine position using four ports. Histopathology revealed

one case ganglioneuroma, two cases functional adrenocortical adenoma and one case endothelial cyst. All procedures were successful, no conversions to open surgery were required, and no postoperative complications or deaths occurred. Blood loss during surgery was minimal, and the mean postoperative hospital stay (range, 3–5 days). None of the patients showed signs of recurring disease at follow-up. The other two cases was presented during the first two months of life with huge left abdominal mass, after thorough investigation (MRI,MIBG,HVA,BM,….) that suspect neuroblastoma with many IDRF, open surgical biopsy was done and proved the diagnosis of undifferentiated NB with MYCN amplification . After chemotherapy there were persistence of IDRF so open surgery was done.

Conclusions: Anterior Laparoscopic adrenalectomy is a safe, feasible, and reproducible technique offering numerous advantages. MIS for benign adrenal masses may be considered the standard approach. However for malignant lesions especially neuroblastoma MIS should be limited to those with small localized tumors L1 that show very low and low risk, with no IDRF and favorable biology.

Continent catheterizable bladder tube: An innovative surgical modality for pediatric patients with large bladder capacity.

Shady Shokry *& Sameh A Hay.* ***Ain-Shams, Egypt.***

Objective: To present a modified technique and early outcome of bladder tube as a catherterizable channel in pediatric patients with intractable voiding dysfunction or neurogenic bladder associated with large bladder capacity.

Materials and methods: Eight patients underwent the procedure during the period from January 2014 to January 2018. A pfannenstiel incision is done to avoid intraperitoneal dissection. Proper mobilization of the bladder and a 2 cm vertical flap at the dome of the bladder is done and tubularized over a 12 Fr catheter. Then this flap is invaginated into the bladder and its other end tunneled to the umbilicus, followed by closure of the bladder in two layers.

Results: Five patients were successfully self catheterizing. One patient had stenosis of the tube which was managed by dilatation. One patient had complete necrosis of the flap and another one had a refluxing badder tube, both required conversion to an alternative catheterizable channel.

Conclusion: Continent catheterizable vesicostomy is an innovative technique for urinary drainage in patients with large bladder capacity that spares the use of appendix or ileum and avoids intraperitoneal dissection.

Thoracoscopic Repair of Type C Esophageal Atresia: An Italian and Egyptian Experience.

Moustafa El Ayyouti, Adham El Saied, Mohammed *El Ghazaly, Girolamo Mattioli, Michela Cing Yu Wong & Mario Lima.* ***Mansoura, Egypt.***

Objectives: To assess the efficacy and peri-operative outcomes of thoracoscopic repair (TR) for type c esophageal atresia (EA)**.**
Methods: From January 2015 to January 2018, we prospectively observed 26 patients (16 boys, 10 girls) underwent thoracoscopic repair for type c EA in three university hospitals (Two in Italy and one in Egypt). Patients weighing 1.570g to 3.69g, 14 of them had associated anomalies. 3 ports were placed in 18 cases while a fourth trocar was needed for lung retraction in 8 patients. Insufflation pressure was maintained on 4-6 mmHg. The fistula was closed in all cases by 4/0 nonabsorbable suture. The esophageal anastomosis was made over 6f nasogastric tube by 6-9 simple interrupted stitches. Contrast swallow was performed on a postoperative day 5 to 7 after weaning from ventilation.
Results: 22 cases of 26, the procedure was successfully completed, while 3 cases were converted to thoracotomy. Staged operation with ligation of the fistula only was applied to one baby due to severe prematurity. The mean operative time was 163 minutes ranged from 70 to 240 minutes. The anastomotic leak rate was 15.3% (4 cases), all of them treated conservatively except one with a major leak which needs a diversion. 8 cases (30.7%) developed anastomotic stricture which required one to four sessions of dilatation. There was one case of mortality due to sepsis 2 months postoperatively.
Conclusions: TR for type c EA can be safely performed by an experienced minimally invasive pediatric surgeons. Short-term outcomes are comparable to those of open approach with the advantages of intra-operative excellent visualization and minimization of musculoskeletal deformities.

A pilot study on outcome of laparoscopic-assisted antegrade continent enema (ACE) for fecal incontinence (FI) in children at Cairo University

Ahmed Gabr, *Aly Shalaby, Mostafa Gad, Ahmed Fares, Khaled Bahaa El Din & Sherif Kaddah.* ***Cairo, Egypt***

Purpose: To introduce a new procedure that will supplement the management of FI in children due to anorectal malformations (ARMs), Hirschsprung's disease (HD), neural tube defects (NTDs) and intractable pseudo incontinence, and to evaluate postoperative complications.
Methods: Patients were recruited from the pediatric colorectal outpatient clinic (OPC) at our facility. Quality of life (QOL) questionnaire and fecal incontinence index (FII) were used preoperatively. The same two methods in addition to stooling survey, bowel symptoms follow up sheet and questionnaire about the procedure were used postoperatively.
Results: 17 Children aged 6–12 years (mean age of 8.0 ± 2.06) including 13 males (76.5%) and 4 females (23.5 %) were studied over a 20 month period. The recruited cases involved ARMs (53%), HD (23.5%), NTDs (17.6%) and intractable pseudoincontinence (5.9%). QOL improved 2.76 ± 0.43 to 15.70 ± 1.21, $p<0.05$. FII showed significant improvement: 19.59 ± 0.93 versus 1.88 ± 2.87, $p< 0.05$. The stooling survey showed lower scores representing better outcome: the total score was 9.88 ± 4.41, the continence score was 2.82 ± 3.13 and the stool pattern score was 3.09 ± 1.31. Bowel symptoms follow up sheet demonstrated a significant improvement of voluntary bowel movements or the ability to decide when to pass stools, as well as a significant decrease of soiling. The questionnaire about the procedure showed that the range of volumes used in ACE is wide, the volume and frequency of enema have to be tried out over a long period of time, and that all parents recommend ACE for children with similar conditions. Postoperative complications were stenosis (29.4%), leakage (29.4%) and false passage (5.9%).
Conclusion: ACE is a quick procedure with low complications. It improves QOL of children with FI. It is easy to implement in low to middle income countries.
Keywords: ACE-Fecal incontinence-Children-Cairo University.

TIP Versus Grafted TIP in distal hypospadias repair.

Ahmed El Nashar, *Mohamed El Zohiri, Adham El Saied & Mohamed El Ghazaly.* ***Mansoura, Egypt.***

Background/Purpose:

Tubularized incised plate urethroplasty repair **(Snodgrass.,1994)** has become the most popular technique for repairing distal hypospadias at many institutions during the last 2 decades. Although this technique is easily applicable with good cosmetic results, several complications, including meatal and/or neourethral stenosis, have been reported. Dorsal inlay graft urethroplasty ("Snodgraft") using an inner preputial free graft has been described as an effective method for hypospadias repair with the main advantage of reducing the risk of meatal/ neourethral stenosis. Since this modification was first reported by **Kolon and Gonzales (2000)**, only a few studies of the modification have been conducted to date. The major indications for grafting were the presence of a narrow or shallow glans, or insufficient urethral plate width **(Silay et al., 2012)**. In a trial to address this issue, whether to graft the urethral plate or not; this study was conducted to compare the 2 techniques and report the results.

Patients and methods:

A prospective single blinded randomized controlled trial (by closed envelop method) including 50 cases of distal hypospadias admitted in Pediatric Surgery department at Mansoura University Children Hospital at the period from march 2017 to February 2018 was conducted. These 50 cases were divided into 2 groups; **TIP group** (25 cases) and **grafted TIP group** (25 cases). All cases underwent preoperative evaluation including: age at repair, type of distal hypospadias, stretched penile length and penile girth, urethral plate width, glans width. The operative time and blood loss were reported and post-operatively; the cases were evaluated for the intactness of repair, size and shape of the neo-meatus, the presence of post-operative complications as urethral fistula, meatal stenosis, urethral stricture, diverticulum or failure of the repair. The data were collected, tabulated and subjected to statistical analysis.

Results:

The mean age surgery in **TIP group** was 26.6 months compared to 26.7 months in **Grafted TIP group**. The type of distal hypospadias in **TIP group** was coronal in 6 cases (24%), subcoronal in 14 cases (56%) and distal penile in 5 cases (20%); while in **grafted TIP group** it was: coronal in 4 cases (16%), subcoronal in 17 cases (68%) and distal penile in 4 cases (16%). The mean stretched penile length in **TIP group** was 36.8 mm (range 25-50 mm) and in **grafted TIP group** was 35 mm

(range 28-45 mm). The mean penile girth in **TIP group** was 37.3 mm (range 32-45 mm) and in **grafted TIP group** was 39.7 mm (range 30-45 mm). The mean width of the urethral plate in **TIP group** was 5.5 mm (range 3-10 mm) and in **grafted TIP group** was 5.8 mm (range 5-9 mm). The mean glans width in **TIP group** was13.5 mm (range 9-20 mm) and in **grafted TIP group** was 12.1 mm (range 8-17 mm). The mean operative time in **TIP group** was 92.4 min (range 86-105 min) and in **grafted TIP group** was 115.2 min (range 80-130 min) and difference was statistically significant ($P < 0.01$). The length of hospital stay in **TIP group** was 5.7 days (range 5-9 days) and in **grafted TIP group** was 5.5 days (range 4-9 days). The urethral fistula was detected in 2 cases of **TIP group** (8%) and similarly in 2 cases of **grafted TIP group** (8%). The failure of repair occurred in 1 case (4%) of **TIP group**, while occurred in 2 cases (8%) of **grafted TIP group**. The mean size of the neo-meatus in the **TIP group** was 2.7 mm (range 2-4 mm) and in **grafted TIP group** was 3.3 mm (range 2-4 mm). No cases of urethral strictures were detected among cases of both groups during the period of follow up (mean 9 m, range 5-17 months).

Conclusion:

Grafting the urehral plate had no added benefit to the original TIP urethroplasty regarding the incidence of meatal stenosis and urethral stricture complications. The operative time was significantly longer in grafted TIP group. Snodgrass urethroplasty keeps its position as a standard operation in repair of distal hypospadias without chordee.

Keywords:

Distal hypospadias, Snodgrass, Snod-graft, urethral plate.

Short presentations:

- Spontaneous gluteal gangrene in a preterm infant.
  Suha Tewfiq**.** ***Gezira, Sudan.***

- Colonic duplication complicating the management of a case of ano-rectal anomaly.
  Amr Abou Zeid, *Ahmed Zaki, Shaimaa Abd El Sattar.* ***Ain Shams, Egypt.***

- Malrotation with congenital mesenteric defect in a neonate: A rare cause of intestinal obstruction.
  Rafik Shalaby*.* ***Al Azhar, Egypt.***

- Cecal volvulus in a child.
  Basma Ibrahim*.* ***Cairo, Egypt****.*

- Simultaneous volvulus of the ileum & sigmoid colon: Report of a new case & review of literature.
  Hayssam Rashwan*.* ***Alexandria, Egypt.***

- Intussusception in a premature neonate: A rare often misdiagnosed cause of intestinal obstruction.
  Hayssam Rashwan*.* ***Alexandria, Egypt.***

- A case report of Vagino-ileal duplicated colon, its presentation & how to manage?
  Mohammed Takrouney**.** ***Assiut, Egypt.***

- Combined anterior sagittal approach & total urogenital mobilization for the treatment of persistent urogenital sinus: Case report.
  Mario Lima, Francesca Destro, Noemi Cantone, & ***Mohamed A Shalaby*** *& Giovanni Ruggeri.* ***Tanta, Egypt***

- Congenital pancreatic cyst. A case report
  Wael El Shahat*, Mohammed Al Akrashy & Mostafa Al Aaedy*. ***Zagazig, Egypt.***

- A rare case of torsion of wandering spleen in neonate associated with hamartomatous vascular malformation of the spleen
  Mostafa Abd El Latif, ***Heba Taher****, Mahmoud Tarek & Gamal El Tagy.* ***Cairo, Egypt.***

- A palatal foreign body in an infant & the risk of misdiagnosis: A case report with review of literature.

Abeer Abo Al Azayem. *Ahmed Hashim.* ***Cairo, Egypt.***

- A case of intrahepatic arterio-portal fistula associated with an aneurysm & rare hepatic sclerosing hemagioma.
  Muyad Shaban, ***Heba Taher****, Sayed Khedr, Mohamed Ghobashy & Gamal El Tagy.* ***Cairo, Egypt.***

- Endovascular embolization of facial hemangioma followed by surgical excision.
  Omar Mansour, Amr Nassef, Farouk Hassan, Mohammed Ghobashy & ***Moutaz Ragab***. ***Cairo, Egypt.***

- An unusual case of Neuroblastoma of urinary bladder in an infant.
  Ahmed Mohammed. ***Newcastle, UK***.

- Congenital sacrococcygeal neuroblastoma can simulate sacrococcygeal teratoma.
  Ahmed El Haddad*, Ali Basharkhah, Claus-Uwe Weitzer & Holger Till.* ***Tanta, Egypt***.

- Ruptured bladder post-circumcision: A rare complication.
  Sherif Abd El Maksoud. ***Mansoura, Egypt***.

- Extra-renal Wilms' tumor.
  Sherif Abd El Maksoud. ***Mansoura****,* ***Egypt***.

- Two cases of transverse testicular ectopia in consanguineous boys & review of literatures
  Mohamed Abd El Malak*, Ahmed Koritium & Saber Waheeb.* ***Alexandria, Egypt.***

- Indocyanine green (ICG) assisted laparoscopic lymphatic sparing varicocelectomy in adolescents (pilot study).
  Ahmed El Haddad. ***Tanta, Egypt.***

- Abnormal presentation for the case of ureterocele.
  Menan El Sadek *& Mohamed A Baky Fahmy.* ***Al Azhar (Girls), Egypt***

- Bony pelvis as a cause of false transitional zone in the colon of children with functional constipation.
  Ahmed B. Radwan*.* ***Ain Shams, Egypt.***

- Trans-anal approach for rectal atresia: A report of four cases and review of literature.
  Sameh Shehata *& Mohamed El Sawaf.* ***Alexandria, Egypt.***

- Management of Hirschsprung's disease complications.
  Mohamed El Sherbeny. ***Ain Shams, Egypt.***

- Comparison of intracorporeal knot-tying suture (polyglactin) & harmonic scalpel in laparoscopic appendiceal stump closure: A prospective randomized study.
  Hayssam Rashwan. ***Alexandria, Egypt***.

- Appendiceal colic as a cause of recurrent attack of abdominal pain of unknown origin in children.
  Nawf Al Al Kayyat. ***Baghdad, Iraq.***

- Pediatric percutaneous gastrostomy (PEG) vs. laparoscopic gastrostomy. Intra- & post- operative experience.
  Mohamed Hesham Soliman. ***Ain Shams, Egypt.***

- Minimal invasive surgery in duodenal atresia.
  Ahmed Rawash. ***Cairo, Egypt.***

- Evaluation of factors affecting success rate of ultrasound guided reduction with saline in cases of primary intssusception: Prospective study.
  Hayssam Rashwan. ***Alexandria, Egypt***.

- Laparoscopic Morgagni hernia repair in infant with sutures and Ethicon Secure Strap device.
  Medhat Ibrahim. ***Al Azhar, Egypt***.

- Short-term outcome after surgical repair of congenital diaphragmatic hernia in neonates
  Abd El Baset Ali, *& Ahmed Gaafar.* ***Sohag, Egypt***.

- Effect of laparoscopic sleeve gastrectomy on metabolic syndrome in adolescent obesity.
  Mohamed El Ghazeery, *Mohamed Hashish, Mohamed El Sawaf, Mohamed Ashour, Mohamed Metwaly.* ***Tanta, Egypt***

- Combined liver & kidney transplantation in pediatrics.
  Nader Guirguis. ***Ain Shams, Egypt.***

- Laparoscopic pyeloplasty: Preliminary report.
  A Alsaggaf, *A Ghallab, A Zein, M Fayez, Y Owiwi, A Atta, Sh. Alghamdi & E Raboe.* ***KFAFH, Jeddah, Saudi Arabia.***

- Severe penile curvature correction with multiple transverse corporotomies.
  Ahmed Helal, *Ashraf Hamed.* ***Al Azhar, Egypt***.

- Laparoscopic two stage Fowler Stephen orchiopexy (FSO) versus laparoscopic staged traction orchiopexy (SLTO) in treatment of intra-abdominal testis in pediatrics.
  Mohamed El Sherbiny, *Ahmed Salah, Adham El Saied & Mohamed El Ghazaly*. ***Mansoura, Egypt.***

- Müllerian duct remnants in male DSD: presentations, surgical indications & technical experience with laparoscopic approach.
  Ahmed Wishahy. ***Cairo, Egypt.***

- Crossed testicular ectopia (CTE), seven new cases from Egypt add to the knowledge.
  Sarah Magdy. ***Aswan, Egypt***.

- Can fibrin glue be a useful adjuvant to surgical management of recurrent fistula post hypospadias surgery.
  Ahmed Badawi. ***Bani Suif, Egypt.***

- Evaluation of laparoscopic secured suprahepatic placement of the distal catheter of ventriculo-peritoneal shunt in hydrocephalic shunt.
  Hamed Seleim, *Ahmed Marei, Ehab El Refaee, Khaled Bassim, Moemen Farouk, Mohamed Abou El Fadl, Sherif Kaddah & Mohamed El Barbary.* ***Tanta, Egypt.***

- Coccygectomy for chronic refractory coccygodynia in pediatric patients.
  Mohamed Shalaby. ***Tanta, Egypt.***

Posters for Poster Walk

1. Is neonatal PSARP better than traditional three stages for low sitting ARM?
   Raboe E, Ghallab A, Alsaggaf A, Zidan M, Zeinelabdeen A, Owiwi Y, Luoma R. ***KFAFH, Jeddah, KSA.***

2. A 12 month review of bowel atresia at Cairo University.
   Abeer Abo Al Azayem, Aly Shalaby, Abd El Aziz Magdy, Heba Taher, Osama Abd El Azim, Ahmed Arafa, Mostafa Gad, Seham Anwar, Hamed Selim, Mohamed Hamed, Ahmed Kadry, Mahmoud El Fiky, Ayman Hussein, Mohammed El Barbary, Gamal El Tagy & Khaled Bahaa El Din. ***Cairo, Egypt****.*

3. Outcome of refused neonatal surgical cases at Cairo University.
   Aly Shalaby, Moutaz Ragab & Khaled Bahaa El Din. ***Cairo, Egypt****.*

4. Preliminary result of laparoscopic hernia repair.
   A Alsaggaf, A Ghallab, E Raboe, Y Owiwi, A Zeinelabdeen, M Zidan, M Fayez, A Atta, I Abd El Rahem. ***KFAFH, Jeddah, Saudi Arabia****.*

5. Protocol of management of Infantile Hemangioma. A proposal for consensus
   Mohamed Moussa, ***Ain Shams, Egypt***.

6. Laparoscopic hernia sac disconnection & peritoneal closure versus "Double N" technique in pediatric bilateral inguinal hernias.
   Mohamed H. El Emawy, Mohamed S. Hashish, Mohamed I. El Sawaf, Mohamed M. Ashour. ***Tanta, Egypt****.*

7. Circumcisions redo. Beware buried penis is there.
   Ahmed Zaghloul. ***Maadi Military, Egypt***.

8. Torsion of vermiform appendix: A case report & review of literature.
   Moustafa El Ayyouti, Ahmed Salah, Ahmed El Adawy & Ahmed Reda. ***Mansoura, Egypt.***

9. Conjoined twins: A report of four cases.
   Ibrahim Ali Ibrahim. ***Assiut, Egypt****.*

10. Modified Bianchi pyloromyotomy versus laparoscopic pyloromyotomy for patients with infantile hypertrophic pyloric stenosis.
Wesam Mohamed, Mamdouh Abo El Hassan, Ayman Hussein, Ahmed Wishahy & Mohamed Abd El Monsif. ***Cairo, Egypt.***

11. Liver tumors in pediatric age group .
Gamal El Tagy, Mohamed El Barbary, Hesham Abd El Kader, Ayman Hussein & Sayed Khedr. ***Cairo, Egypt.***

12. Renal masses in pediatric age groups.
Sheriff Kaddah, Hisham El Saket, Haytham Essmat, Ayman Hussein, Sayed Khedr. ***Cairo, Egypt****.*

13. Decision making during second stage of laparoscopic assisted orchidopexy for intra abdominal testis.
Abd El Hameed El Kassaby, Sameh A Hay. ***Ain Shams, Egypt****.*

14. Anterior sagittal anorectoplasty as a technique for the repair of female anorectal malformations: A twenty two year single centre experience.
Ahmed El Rouby, Saber Waheeb, Ahmed Koritm. ***Alexandria, Egypt****.*

15. Evaluation of transverse island on-lay flap technique in repair of proximal hypospadias in children.
Mohamed Saber. ***Ain Shams, Egypt****.*

16. An unusual presentation of ileo-ileal intussusception secondary to polypoid lipoma in a child: A case report.
Sarah Magdy Abd El Mohsen. ***Aswan, Egypt****.*

17. The fecal Volatilome is altered in a Murine model of neuroblastoma.
Christoph Castellani, Georg Singer, Margarita Kaiser, Ahmed El Haddad, Wolfram Miekisch, Gert Warncke, Daniela Sperl & Holger Till. ***Tanta, Egypt****.*

18. Uncomment causes for recurring abdominal pain: Laparoscopic diagnosis and management.
Hany Embaby, Amir Maerouf, Sameh Abd El Hay. ***Ahmed Maher, Egypt.***

19. Uretheral mobilisation technique versus standard tubularised incised-plate urethroplasty in primary repair of distal hypospadias: A prospective randomized study.
Hayssam Rashwan. ***Alexandria, Egypt****.*

20. Ten year outcome of gastroschisis.
    Ibrahim Mahran, Aly Shalaby & Khaled Bahaa El Din. ***Cairo, Egypt****.*

21. Effect of topical Mitomycin C injection in treatment of refractory esophageal strictures in pediatric age.
    Mohamad Qinawy, Khaled Salah, Ahmed Wishahy, Wesam Mohamed & Omar Mansour. ***Cairo, Egypt****.*

22. Ventilatory index & pulmonary hypertension limits as selection parameter in thoracoscopic CDH.
    Mohamed Arafa. ***Tanta, Egypt****.*

23. Annular pancreas in neonates, infants & children.
    Ibrahim Ali Ibrahim. ***Assiut, Egypt****.*

24. The pre-sacral tumors in Currarino triad: teratomas or hamartomas?
    Amr Abd El Hamid Abou Zeid, Shaimaa Abd El Sattar Mohammad, Nehal Radwan, Nermine Abd Raboh. **Ain Shams, Egypt**