ABSTRACTS OF SCIENTIFIC PRESENTATIONS

Oral Presentations:

O1 A Low-Cost Stoma Simulator

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1. University Hospitals of Leicester, 2. University of Oxford, UK

Background: Stoma formation is a common neonatal procedure. Traditional surgical training has been based on the deliberate practice on patients. We describe a novel low-cost model for stoma simulation.

Methods: A Tupperware box forms the base of the model. The lid is removed. Inside the box we place a loop of porcine intestine, about 20cm in length. Small or large bowel works. A rectangular sheet of porcine skin is cut to the size of the open container. The skin is secured on the sides with thin rope, producing a drum-like effect. The advantages of the porcine skin is that it’s similar to human skin, and the hypodermis replicates the sheath (especially if the skin is placed in a fridge overnight), to anchor the stoma. The model is conducive to performing a variety of stomas.

Results: This model was used in a national training day for paediatric surgical registrars. All 18 trainees were satisfied with the use of the model. It was rated it as useful (95%) and life-like (85%). The content validity of the model was rated highly.

In the future, we hope to assess the use of this model as an objective structured assessment of technical skills (OSATS).

Conclusion: online sessions are the safest way to deliver academic activities in the time of Covid-19 pandemic, yet we need to refine the session’s topics to suit trainee’s needs along with more trainers involvement.

O2 Trainees Satisfaction with Paediatric Surgery Online Sessions During Covid-19 Period

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Background/ Purpose: During the time of Covid-19 pandemic it was difficult to run face to face academic sessions, so online teaching was the safest and easiest way to deliver the planned academic program. These sessions are presented on weekly basis by the trainees and attended by trainers in Sudan and abroad.

Methods: Total number of delivered sessions was 70. The plat form used for delivering these sessions was jitsi Meet. Data was collected and analyzed using Google forms.

Results: total number of responders was 34 out of 53.35.3% are attending the sessions always, 35.3% are attending sometimes and 29.4% are attending rarely. Regarding the presented material, 29.4% thought it was excellent ,55.9% of the trainees thought it was very good, 11.8% thought it was fair, and only one candidate thought it was poor (2.9%). The level of discussion was rated as excellent by 41.2%, very good by 47.1%, and fair by 11.8%. 94.1% of trainees thought the sessions were attractive. 97.1% of the trainees thought that the sessions were helpful in improving their presentation skills. And the same percentage (97.1%) found the sessions motivating for them to study.

Conclusion: online sessions are the safest way to deliver academic activities in the time of Covid-19 pandemic, yet we need to refine the session’s topics to suit trainee’s needs along with more trainers involvement.

O3 Prospective Study of Laparoscopic Management of Appendicitis During The COVID Pandemic in A Single Paediatric Centre; Comparison to Historic Cohort

Raj Dass, Sesi Hotonu, Fraser Munro, Merrill McHoney
Royal Hospital for Children and Young People Edinburgh, UK

Aim: The COVID pandemic affected the presentation of many conditions. This study analyses and describes the impact of COVID pandemic on management of appendicitis in children and the role of laparoscopy.

Methodology: We performed a prospective (during the pandemic) and retrospective (historic control) review of management and complications of appendicitis in a tertiary paediatric surgical unit. Preoperative data, operative findings and patient outcome measures were compared between groups to identify and differences between the study periods and to identify any factors predictive of outcome measures.

Results: 62 patients were identified in the pre‑pandemic cohort, 71 in the pandemic cohort. There was no significant difference in patient demographics, length of admission or time between admission and surgery between both groups. There was however a significantly longer time between diagnosis and surgery, and presentation to hospital in the pandemic group. Clinical outcomes were comparable between the two groups, with no difference in presence of surgical complications or advanced appendicitis between the two groups. Laparoscopic surgery was safely used to manage appendicitis in the pandemic cohort through utilization of a COVID pathway that included guidance on testing, and use of PPE. Conservative
management in the pandemic cohort was reserved for patients with appendicitis with presence of mass formation.

**Conclusion:** Despite a delayed presentation and a slightly longer delay between admission and surgical management, there was no rise in the incidence of advanced appendicitis, complications of surgery or length of stay during COVID-19 pandemic. Laparoscopic appendicectomy was also shown to be a safe and effective standard for management of appendicitis during the pandemic.

### 04 The Use of NARCO-SS Score in Predicting Adverse Events in Children Undergoing Major Elective Abdominal Surgery at The University Teaching Hospital, Lusaka, Zambia

**Martha Mukonka, Bvulani Bruce, Mumpansha Hazel, Mulenga Mulewa**  
Zambia Association of Paediatric Surgeons, Zambia

**Aim:** To determine the reliability of NARCO-SS in predicting perioperative adverse events and to determine risk factors for perioperative adverse events in patients undergoing abdominal surgery.

**Methodology:** A prospective cohort study, from December, 2019 to December, 2020. Patients scheduled for abdominal surgery were scored pre-operatively and end points were; when an adverse event occurred or up to 30 days. Analysis of the reliability of the tool, bivariate and multivariate logistics regression were done.

**Results:** 119 patients were enrolled and 49% of them had adverse events. Both bivariate and multivariate analyses showed no significant association between the NARCO-SS score and the occurrence of adverse events and escalation of care. The area under the ROC curve (AUC) of the NARCO-SS for adverse events was 0.518, there was a significant association between choice of skin preparation or fascial closure materials for SSI. 15.5% and 30.0% among Clean-contaminated and contaminated/dirty respectively. There was no statistically significant difference between choice of skin preparation or fascial closure materials for the 30 re-operation or mortality among the patients.

**Conclusion:** High SSI rates still predominate even in this High quality, pragmatic, well reported trial. No evidence supporting 2% alcoholic chlorhexidine or triclosan sutures. This calls for change in global guidance on SSI.

### 05 Pragmatic Multicentre Factorial Randomised Controlled Trial Testing Measures to Reduce Surgical Site Infection in Low- and Middle-Income Countries (FALCON)

**Abdur-Rahman Lukman Olajide, For NIHR Global Health Research Unit on Global Surgery**  
University of Ilorin, Nigeria

**Aim:** Surgical site infection (SSI) represents a major burden for patients, doctors, and health systems across all settings. SSI is the commonest postoperative complication worldwide and the commonest healthcare-associated infection in low- and middle-income countries (LMICs). We aimed to assess whether either (1) 2% alcoholic chlorhexidine versus 10% povidone-iodine for skin preparation, or (2) triclosan-coated suture versus non-coated suture for fascial closure, can reduce SSI at 30-days post-surgery for each of clean-contaminated and contaminated/dirty surgery.

**Methodology:** Pragmatic, patient and outcome assessor blinded, 2x2 factorial, stratified, multicentre randomised controlled trial. Adults and children undergoing emergency or elective surgery with abdominal incision of at least ≥5cm through open or laparoscopic surgery were eligible.

**Results:** 5788 patients were recruited from 54 hospitals in 7 LMICs countries. 3091 and 2697 were clean-contaminated and contaminated/dirty wounds respectively. 84% adults and 16% children, 51% emergency and 49% elective cases. There was 22% overall SSI with 15.5% and 30.0% among Clean-contaminated and contaminated/dirty respectively. There was no statistically significant difference between choice of skin preparation or fascial closure materials for the 30 re-operation or mortality among the patients.

**Conclusion:** We aimed to assess whether any of (1) 2% alcoholic chlorhexidine versus 10% povidone-iodine for skin preparation, or (2) triclosan-coated suture versus non-coated suture for fascial closure, can reduce SSI at 30-days post-surgery for each of clean-contaminated and contaminated/dirty surgery.
Abstract

There is limited published data and apparent delays 79 studies fitting the search criteria were identified. After Data collection form was designed and sent out through

There were 531 entries from 6 countries in the African

Trauma remains a leading cause of morbidity and mortality in

A PubMed search with the MESH Terms “electrical

There was a disproportionate response to the

Stay (LOHS) 0 – 165 days. Outcome was full recovery in 90.6%,

7.7%, analgesia 12%. Definitive treatment 95.5%, Length of Hospital

with IVF was carried out in 71%, nasal Oxygen 16.4%, Blood tx

lift-jaw thrust (0.6%) and IVF (0.4%). In-Hospital initial management

facility was ranging between 2 minutes and 210 days (mean 6.5 days

and median 6 hours). Initial management varied from None (70.2%),

with different injury mechanisms and patterns. The two main causes

of trauma in children in this study were the falls from height and

road traffic accidents. Limb fractures and TBIs were the commonest

types of sustained injuries in children. Long distances to travel to

reach healthcare facilities was noticeable in this study, together with

substantial lack of adequate ambulance facilities and shortage in

necessary subspecialty services such as that of neurosurgical and

orthopedic services including rehabilitation.

07 A Study of Pediatric Trauma in Africa

Abdelbasit E Ali, Adesoji Ademuyiwa, Kokila Lakhoo, John Kfas,

Espehoumenou, M Murphy, Caldorico, A Leopold, Rouma Bankole,

Seraphin Gbenou

PAPSA Trauma Working Group

Aim: Trauma remains a leading cause of morbidity and mortality in

children across the world, and particularly so in LMICs including

Africa. Accordingly, there is a need to have adequate registry of the

scale of the problem and to define the limiting factors of provision

of the necessary services required to reduce the potential mortality

and disability. In this regards, and following a panel discussion on

Paediatric Trauma in Africa at the 12th PAPSA meeting in Addis

Ababa, Nov 2018, a consensus was reached on the need for a trauma

registry establishment to obtain a uniform database. A preliminary

survey was launched and here below, we present the results of this

study.

Methodology: Data collection form was designed and sent out through

PAPSA communication platform to all its registered membership. Data
collection form requested provision of prospective data on all paediatric

major trauma admitted to or seen at participants’ health facilities

during the beginning of April 2019 and the end of June 2020. Data

requested include: hospital location, city, country, child’s age, gender,
type of injury, mechanism of injury, severity, initial management

received, method of transport, time to arrive to hospital, availability of

surgical specialties, length of hospital stay and injury outcome.

Results: There were 531 entries from 6 countries in the African
continent and contribution from one center in UK for comparison.

Response to the survey was variable ranging from 1 (in Madagascar)
to 383 in (Benin). Injured children ages ranged between one day and

18 years with a mean age 3.53 years and median age 1.34 years. Males

were more frequently injured than females (62 vs 38%). The leading

causes for injuries were falls 194 (36.53%) and RTA 176 (33.15%),

followed by obstetrical (7.9%), thermal (5.1%) and domestic injuries

(4.1%), and others (13.22%). Firearm injuries were reported in 4
cases, all of whom were from a UK center. The commonest trauma encountered was limb fractures (34.1%), followed by traumatic brain injury (20.9%), burns (10.4%), multiple

injuries (9.2%), abdominal injuries (6.2%), chest injuries (4.1%) and

others (15%). Regarding the method of transport, public and private

transport were used in almost 60% of cases to reach to healthcare

facilities while ambulance service was used in 11% of cases. Distance
to a health facility varied between 1-157 Km, with a mean of 36.12Km

and a median of 19Km, and time taken from injury to arrive at a health

facility was ranging between 2 minutes and 210 days (mean 6.5 days

and median 6 hours). Initial management varied from None (70.2%),

analgesia administration (4.5%), ambu bag respiration (1.7%), chin

lift-jaw thrust (0.6%) and IVF (0.4%). In-Hospital initial management

with IVF was carried out in 71%, nasal Oxygen 16.4%, Blood tx

7.7%, analgesia 12%. Definitive treatment 95.5%, Length of Hospital

Stay (LOHS) 0 – 165 days. Outcome was full recovery in 90.6%,
morbidity and a disability in 8.1% and mortality was encountered in

1.3% in this study. There was shortage in subspecialty facilities in

many hospitals, this has been especially reported in districts.

Conclusion: There was a disproportionate response to the

questionnaire. The spectrum of paediatric trauma varies significantly,

with different injury mechanisms and patterns. The two main causes

of trauma in children in this study were the falls from height and

road traffic accidents. Limb fractures and TBIs were the commonest

types of sustained injuries in children. Long distances to travel to

reach healthcare facilities was noticeable in this study, together with

substantial lack of adequate ambulance facilities and shortage in

necessary subspecialty services such as that of neurosurgical and

orthopedic services including rehabilitation.

08 A Structured Systematic Review of the

Burden of Electrical Burns in Children in

South Africa

Evelyn Thangaraj, Gabriella Y . Hyman, Kokila Lakhoo

Oxford University Global Surgery Group, University of Oxford, UK

Aim: The global burden of paediatric electrical burns is estimated to be 2-4% of all paediatric burns. 20.8% of South Africans live in

informal settlements with limited access to safe electricity. The aim of this study is to estimate the burden of paediatric electrical burns in

South Africa. Through a structured systematic review of published literature, we aim to demonstrate the need for further studies and

guide public health interventions.

Methodology: A PubMed search with the MESH Terms “electrical burns”, “children” and “South Africa” did not retrieve any papers. The MESH Terms “burns”, “children” and “South Africa” retrieved 76 PubMed papers. 3 additional papers were retrieved using Google Scholar. These were screened to assess for data on paediatric electrical burns.

Results: 79 studies fitting the search criteria were identified. After

screening, 34 full-text articles were assessed for eligibility. Of these,

9 provided data on paediatric electrical burns. All studies included

were retrospective, cross-sectional studies published from 2010. They
describe the proportion of paediatric electrical burns from 1995 to

2016. In total, 20157 paediatric burns patients were included, 3.38%

(n=682) were electrical burns patients. Electrical burns as a proportion
defined of total paediatric burns varied from 1.8% to 7%. Figure 1.1 reflects the

studies reviewed in chronological order.

Conclusion: There is limited published data and apparent delays

to publications pertaining to paediatric electrical burns in South Africa. This is relevant given the impetus to move away from gas

and open-flame appliances towards electricity as a safer source of

energy. However, lack of access to affordable electricity has resulted in

improved electrification in informal settlements. There appears to be a rise over time in electrical burns as a proportion of total

paediatric burns seen.

09 Wilms Tumor in Low- and Middle-

Income Countries: Current Practices and

Priorities

Megan Vu, Jaime Shalkow, Bindi Naik-Mathuria, Sajid S. Qureshi,

Doruk Ozgediz, Kokila Lakhoo, Hafeez Abdelhafiez

Baylor College of Medicine Michael E. DeBakey Department of Surgery, USA
Abstract

**O11 Factors Associated with Treatment Outcomes of Children Post Nephrectomy for Nephroblastoma at The University Teaching Hospitals in Lusaka, Zambia**

Moonde Zachias Muulu, Bruce Bvulani, Patricia Shinondo, Patrick Kaonga
University of Zambia

**Aim:** Nephroblastoma is the commonest primary malignant renal tumour of childhood. Survival rates in high-income countries are approximately 90%. However, low-income countries have low survival rates of 20% to 50%. This study assessed factors associated with treatment outcomes of children post nephrectomy for nephroblastoma at the University Teaching Hospitals in Lusaka, Zambia

**Methodology:** A retrospective observational cohort study was conducted where all children diagnosed with unilateral Wilms tumour below the age of 16 years who had nephrectomy from July 2016 to June 2019 were enrolled. Sociodemographic, clinical characteristics and treatment outcomes were noted and analysed using STATA 16

**Results:** 30 patients were enrolled. The male to female ratio was 1:1. The one-year event-free survival was 46.7%. Treatment abandonment accounted for 36.6% of the participants. 16.7% of the patients had disease progression. No patient had a relapse or died during the one-year follow-up period. 66.7% had advanced disease stage III and IV. Advancement in age (above 4.3 years), living in a rural environment more than 100 Kilometers away from Lusaka, and advanced disease stage were all associated with a poor outcome.

**Conclusion:** Factors associated with poor outcomes in this study were advanced age and late presentation.

**O12 An Unusual Cause of Complex Enteroenteric Fistulae in Children: A Warning Letter to The Parents Number II**

Prof Gamal Al-Saied
Al-Azhar University, Cairo, Egypt

**Aim:** To raise awareness of parents and general practitioners about the danger of high-strength Neodymium Magnetic Beads Ingestion by children either multiple magnets or single magnet with other metallic foreign bodies simultaneously or shortly after each other.

**Methodology:** Patients and methods: Five children (3boys and 2girls) have swallowed multiple high-strength and powerful rare earth element Neodymium magnets. Their ages ranged between (nine months to six-year-old). Three cases were subjected to open and two for laparoscopic exploration (one of them converted to open).

**Results:** Results: multiple complicated enteroenteric fistulae in three cases and multiple perforations of the small intestine in two cases. Resection anastomosis was done for one case and simple closure of small bowel perforations for the other four cases. Post operative course was uneventful for all patients and discharged in a good general condition.

**Conclusion:** General practitioners should be aware of the danger and complications of Neodymium magnetic beads ingestion by children. Early endoscopic removal is recommended if...
Abstract

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Abnormal wide anorectal angle and wide pelvic hiatus were frequently encountered following previously complicated PSARP procedure. The study included 27 boys who were re-operated to study anatomical derangements following previously complicated PSARP procedure, in addition to the effect of reoperation on rectifying this distorted anatomy.

Methodology: The study included 27 boys who were re-operated after a previously complicated PSARP. Included cases were divided into two groups: Group A (14 cases) were referred before colostomy closure with an obviously complicated primary operation; and Group B (13 cases) were referred with delayed complications after colostomy closure.

Pelvic MRI examinations were performed before reoperation in 19 cases. In nine of these cases, a repeat MRI examination was performed at follow up after reoperation to study the effect of redo surgery on rectifying the distorted anatomy.

Results: Abnormal wide anorectal angle and wide pelvic hiatus were common anatomical derangements after a previously complicated PSARP. An important goal of reoperation was reconstruction of the levator ani behind the anorectum trying to create a more acute anorectal angle and a narrower pelvic hiatus. The success of this corrective step was evaluated by MRI comparing pre- and post-operative measurements that showed a favorable decrease in the values of anorectal angle and hiatal/PC ratio. Improvement of faecal continence was documented after reoperation in 8 out of 10 cases in group B.

Conclusion: A wide pelvic hiatus was a frequently encountered postsurgical complication after failed PSARP that has most probably resulted from poor reconstruction of the pelvic floor at time of the primary repair. Reapproximation of the split halves of levator ani in the midline behind the anorectum at reoperation can help to correct the distorted internal anatomy and improve bowel control in these cases.

O13 Anatomical Derangements after Failed PSARP: Correlating MRI and Operative Findings

Amr A AbouZeid, Shaimaa Abdelsattar Mohammad
Ain Shams University, Egypt

Aim: to study anatomical derangements following previously complicated PSARP procedure, in addition to the effect of reoperation on rectifying this distorted anatomy.

Methodology: The study included 27 boys who were re-operated after a previously complicated PSARP. Included cases were divided into two groups: Group A (14 cases) were referred before colostomy closure with an obviously complicated primary operation; and Group B (13 cases) were referred with delayed complications after colostomy closure.

Pelvic MRI examinations were performed before reoperation in 19 cases. In nine of these cases, a repeat MRI examination was performed at follow up after reoperation to study the effect of redo surgery on rectifying the distorted anatomy.

Results: Abnormal wide anorectal angle and wide pelvic hiatus were commonly encountered following previously complicated PSARP. An important goal of reoperation was reconstruction of the levator ani behind the anorectum trying to create a more acute anorectal angle and a narrower pelvic hiatus. The success of this corrective step was evaluated by MRI comparing pre- and post-operative measurements that showed a favorable decrease in the values of anorectal angle and hiatal/PC ratio. Improvement of faecal continence was documented after reoperation in 8 out of 10 cases in group B.

Conclusion: A wide pelvic hiatus was a frequently encountered postsurgical complication after failed PSARP that has most probably resulted from poor reconstruction of the pelvic floor at time of the primary repair. Reapproximation of the split halves of levator ani in the midline behind the anorectum at reoperation can help to correct the distorted internal anatomy and improve bowel control in these cases.

O15 Feasibility of Intravenous Nutrition for the Management of Gastroschisis in Africa

Naomi J Wright, Aarionla Olaiya, Francis Abantanga, Alhassan Abdul-Mumin, Michael Amoah, William Appeadu-Mensah, Zaitun Bokhary, Bruce Bvulani, Mulenga Mulewa, Bip Nandi, Boateng Nimako, Stephen Tabiri, Abiboye Yifieyeh, Kate Arnold, Sandia Naik, Niyi Ade-Ajayi
Kings College, UK

Aim: Routine parenteral nutrition (PN) has improved gastroschisis (GS) outcomes in high-income countries (HICs). Many low- and middle-income countries (LMICs) cannot deliver standard neonatal PN. We examined the feasibility of intravenous nutrition (IVN) delivery for GS.

Methodology: Seven paediatric surgery centres (4 African countries) participated in a multi-centre study (May – December 2019). Protocols for IVN delivery were determined at each centre by a local principal investigator, specialists, the study lead and an expert gastroenterologist. Each centre aimed to deliver 100kcal/kg/day; 10% dextrose (1g=4kcal) or substitute and essential and semi-essential amino acids (AA) as protein source (1g=4kcal) delivered as synthetic AA solution. Lipid (1g=9kcal) was used when available. Enteral feeds were advanced early to reduce the complications of long term PN use. Venous access difficulties were noted.

Results: Six of 7 centres initiated or enhanced IVN delivery. All 6 centres aimed to commence IVN on day 1 of admission. Five centres utilized Astym or Celemim and 1 added Celpid selectively. The 6th centre utilised Kabiven with Intralipid selectively. Breast feeding was
Abstract

The majority of the neonates in this study were outborn. The usefulness of the course was rated as very good by 95% and good by 45%. An overwhelming 90% would recommend the course to others. Bowel anastomosis and gastrostomy were rated as very good by 75% respondents. The DA model was rated as very good by 65%. The OA+TOF model was rated as very good by 30% and good by a further 40%. The results for pyeloplasty were similar. The venue was rated as very good by 65% of candidates and the catering was deemed very good by 60% of those assessed.

Conclusion: The HG course can be run by a local faculty successfully and with a high degree of satisfaction.

P2 Prevalence of Gastrochisis and its Neonatal Mortality in the Eastern Cape Province

Sello Machaea, Phumza Nogela, Milind Chitnis
Walter Sisulu University, South Africa

Aim: The purpose of this study was to calculate the prevalence of gastrochisis and report on its neonatal mortality in the Eastern Cape Province of South Africa.

Methodology: A retrospective observational study was done on all neonates with gastrochisis, presenting to a tertiary facility offering paediatric surgical services within the Eastern Cape Province from 1 January 2016 up to 31 December 2018.

Results: A total of 37 neonates were included in the study. The prevalence of gastrochisis ranged from 0.07-0.18% throughout the 3-year study period. The majority (81%) of the neonates were born and delivered by mode of caesarean section. Nearly 60% (n=22) were females. Over half [54% (n=20)] of them died within the neonatal period. Interestingly, their mothers tended to be young, with a mean age of 20 years.

Conclusion: The majority of the neonates in this study were born and female. Although their mortality rate was higher than reported in the 1st world countries, it was much improved from what is reported in the developing countries.

P3 Mucous Fistula Refeeding in Extremely Low-Birth-Weight Infants with Enterostomies After Intestinal Perforation

Tamaki Iwade, Koichi Ohno
Japanese Red Cross Society Osaka Hospital, Japan

Aim: Though enterostomy is often performed for intestinal perforation in extremely low birth weight infants (ELBWIs), poor weight gain is sometimes observed postoperatively. Recently, some reports suggested that mucous fistula refeeding (MFR) was improved...
Abstract

P5 Anorectal Anomalies in The Male: Revisiting The Radiological Classification

Amr Abdelhamid AbouZeid, Shaimaa Abdelssattar Mohammad, Sherif Eihussiny Ibrahim, Leila Rawash ElDieb
Ain Shams University, Egypt

Aim: Classifying anorectal anomalies (ARA) has always been a matter of debate among paediatric surgeons. A new classification does not necessarily imply discarding older ones. Several concepts have been introduced in the past and stood the test of time being still valid up till now.

In this report we present our experience in managing a group of boys with ARA by PSARP. We have tried to enhance the current classification to include information about the level of the rectum in relation to sacrum, not just the location of the fistula.

Methodology: The study included 62 consecutive male patients with anorectal anomalies who underwent PSARP between 2009 through 2019. Included cases were either recto-bulbar fistula (21 cases), recto-prostatic fistula (30 cases), or imperforate anus without fistula (11 cases). Their age at operation ranged from 3-36 months (median 6 months, mean 7.8).

The preoperative imaging findings were retrospectively analysed in relation to operative findings.

Results: Complementary to sub-classifying recto-urethral fistula into recto-bulbar and recto-prostatic, we highlight the importance of identifying the level of distal rectum in relation to sacral vertebrae. This can be used in cases with absent fistula. Also, it can help to differentiate between two subgroups of recto-prostatic fistula with different degrees of severity.

Conclusion: In management of anorectal anomalies, the sacrum can provide two important indicators: a prognostic value for continence, and anatomical landmark to stratify the level of distal rectum in the pelvis which is crucial for planning the best surgical approach.

P6 Balloon Anal Dilatation: An Alternative Technique for Children with Anorectal Malformation

Abdelbasit E Ali, Nabil A Shiba, Mishraza Shaikh
King Saud Medical City, Riyadh, KSA

Background: Regular anal dilatations are commonly practiced following posterior sagittal anorectoplasty (PSARP) in the management of anorectal malformation (ARM). This is necessary to maintain anal patency till stoma closure is achieved. Here, we present an index case of a failed PSARP due to difficult anal dilatation and to describe an alternative technique for anal dilatation.

Case Presentation: A 4-year-old male child required re-do PSARP following a failed repair due to a false anorectal passage as a result of faulty anal dilatation.

Methods: Following a redo PSARP, patient started on regular balloon anal dilatation (BADi). The technique was convenient to parents, acceptable to the child and provided a satisfactory result.

Conclusion: Balloon anal dilatation (BADi) following anorectoplasty for ARM can be a safe and effective alternative to conventional anal dilatation.
P7 Amyand’s Hernia in A 3 Years Old Child: A Case Report and Literature Review

Hani Elhaj, Mubarak Hamad
Khartoum Teaching Hospital, Sudan

Background: Amyand’s hernia is a rare type of inguinal hernia where the appendix is located within the hernia sac. Previous studies postulated that Amyand’s hernia occurs in 1% of all inguinal hernias and the presence of appendicitis within the Amyand’s hernia accounts for 0.1% of all appendicitis.

Case presentation: A 3 years old boy was referred to our hospital following diagnosis of a congenital right inguinal hernia. No symptoms or signs of strangulation or obstruction. Preoperative laboratory parameters were within normal limits. Elective right inguinal herniotomy was done where incidentally a healthy appendix was found within the hernia sac with the tip of the appendix adherent to the hernia sac. Reduction of the apparently healthy appendix into the abdomen and herniotomy was done, the patient passed through an uneventful post-operative course and discharge home without complications.

Conclusion: Due to the rarity of the Amyand’s hernia and its variable presentation, the diagnosis of this hernia is mostly incidental as postulated in the revised available literature, and as in our case. There has always been a debate about the management of the appendix within the hernia sac that depends on the status of the appendix at the time of surgery, here we followed the recent agreed upon guidelines that no need to do appendicectomy.

P8 Clinical Presentations, Management and Early Outcome of Cystic Hygroma in Sudanese Children (From Jan 2018 – Dec 2020)

Hani Elhaj, Omer Ibrahim
Khartoum Teaching Hospital, Sudan

Aim: 1) To identify the socio-demographic characteristics of patients 2) To determine the clinical patterns of cystic hygroma. 3) To describe the modalities of treatment. 4) To study the early outcome/prognosis of management.

Patients and methods: Descriptive, cross-sectional, hospital-based study, was done with retrospective collection of data from patients records in pediatrics surgery centers in Sudan from Jan 2018 – Dec 2020.

Results: 31 cases. Male to female ratio of 2.87. With mean age of 31.2 months. Vaginal delivery in 87.1%, and Caesarian section in 12.9% of cases. Faciocervical swelling in 87% (27 cases), of those respiratory/feeding difficulties in 9.7% (3 cases), painful swelling i.e. infected cyst in 3.2% (1 case). The most common anatomical site of cystic hygroma in the study was cervico-facial accounting for (87.1%) (27 cases). (9.7%) (3 cases) with axillary swelling, (3.2%) one case presented with anterior chest wall swelling. No associated congenital anomaly. Positive family history of cystic hygroma in only one case. 74.2% (23) cases were diagnosed via clinical history and examination, with only 19.4% (8) cases were offered a diagnostic U/S scan. No result came as malignant. 83.9% (26) cases were diagnosed postnatally and only 16.1% (5) diagnosed antenatally. (29) cases were treated with surgical excision, (2) cases treated with Bleomycin injection that was followed by surgical excision. Outcome was full remission in 93.5% of cases, with 3.2% (1) case experienced facial nerve injury, and 3.2% (1) case developed post-operative pneumonia. Cross tabulation and fisher’s exact test showed no statistically significant association between gender and age.

Conclusion: CH is common in Sudan, following the international figures in form of the demographic. Limited treatment modalities. The antenatal diagnosis of CH is still deficient in Sudan.