

Background Although Hydatid liver disease may be asymptomatic, one complication of Hydatid disease is perforation of the cyst into the peritoneal cavity after trauma. We present herein a case presented after trauma and had a diagnosis of Hydatid cyst rupture into the peritoneum previously asymptomatic boy.

Case A 7-year-old boy presented with mild abdominal pain for 6 h. His parents told that his abdominal pain was suddenly commenced after falling down from swing when playing at the playground. They also complained of itching on the whole body starting soon after the trauma. His blood pressure was 90/60 mmHg, heart rate 118/min, and temperature 37.0°C. On the physical examination, urticaria was seen over the thigh and trunk, abdominal examination revealed generalised tenderness. Ultrasonography and computed tomography showed multiple cystic lesions in the liver and one of them had hypoechoic contents and floating echogenic membranes and also free fluid were seen in the pelvis. Intravenous fluids were started followed Hydrocortisone and antihistamine administered along with antibiotic prophylaxis. The patient underwent surgery, 3 cysts at different localization and also a ruptured cyst 4 cm in diameter at the segment 1 were seen. The germinative membranes and the daughter vesicles were removed and abdomen was irrigated with hypertonic saline (3% NaCl). Postoperative albendazole therapy was given for two months.

Conclusion Rupture of Hydatid cyst should be considered in the differential diagnosis at the presentation of acute abdominal findings with urticaria after abdominal blunt trauma. US and CT are effective in diagnosing of this rare condition.

PO-0907 A CASE OF BACK TO THE FUTURE: PAEDIATRIC ABDOMINAL PAIN. THOROUGH HISTORY, EXAMINATION AND SENIOR CLINICIAN INVOLVEMENT REMAIN IMPERATIVE FOR SUCCESSFUL MANAGEMENT

¹C Beardsley, ²A Dillon, ²M Chiu, ³F Nguyen, ³GDH Croaker. ¹General Surgery, Canberra Hospital, Canberra, Australia; ²Medical School, Australian National University, Canberra, Australia; ³Canberra Hospital, Dpt Paediatric Surgery, Canberra, Australia

10.1136/archdischild-2014-307384.1529

Introduction The inherent variability of the history and exam in paediatrics make acute abdominal pain a diagnostic challenge. Investigations such as white-cell-count (WCC), C-reactive-protein and radiological studies have been advocated to help objectify management. Whilst Computed Tomography is accurate, the amount of radiation involved renders it unacceptable and thus many view ultrasonography as an acceptable alternative. But do these tests add value?

Methods Retrospective review between 2002–2012. Data was collected for children under sixteen with acute abdominal pain undergoing investigation with ultrasound and haematological testing. For 2005, a retrospective review was conducted for children presenting with abdominal pain to obtain data on demographics, history and examination findings. Analysis for diagnostic accuracy was undertaken.

Results 5000 records were reviewed, and 1744 records included. 6% of children developed appendicitis. Findings of worsening pain, associated with nausea or vomiting yielded moderate sensitivities and specificities (combined values over 70%). Fever was non-specific. Localised tenderness is the most sensitive exam finding and rebound tenderness is the most specific, both having values over 90%. WCC and CRP offer similar sensitivities and specificities, both producing results under 80%. Only 30% of ultrasounds visualised the appendix, significantly

dampening the sensitivity below 75%. The incidence of appendicitis in the non-visualised group was 8%.

Conclusion No test is useful for ruling out appendicitis. Given that the incidence of appendicitis is higher in the non-visualised group, this is especially so with ultrasonography. Clinical examination with senior input is the most sensible strategy for managing children with acute abdominal pain.

PO-0908 EXTERNAL INFLUENCES ON PAEDIATRIC ABDOMINAL PAIN: A HOLISTIC VIEW MAY HELP

¹C Beardsley, ²G Melino, ²GDH Croaker. ¹General Surgery, Canberra Hospital, Canberra, Australia; ²Paediatric Surgery, Canberra Hospital, Canberra, Australia

10.1136/archdischild-2014-307384.1530

Introduction Abdominal pain should always be treated as a serious complaint by the clinician due to the large proportion of potentially serious medical conditions which can present with abdominal pain. However, a large proportion of children will not have any significant disease processes underway. This study focuses on extrinsic factors which may be associated with abdominal pain presentations to help elucidate appropriate management.

Methods Prospective study. A survey was administered to children and their parents, presenting to casualty for assessment of abdominal pain. Questions related to the patient and their family. Information obtained related to the child's health, social/family dynamics and family history were obtained.

Results 97 surveys were conducted. There was an equal sex distribution. Mean age was 11. The three most common diagnoses were of Benign pain, Mesenteric adenitis and Appendicitis. There was a peak in winter presentations for those with benign pain. 27% of children with benign pain had parents who smoked. Inflammatory conditions were common with 38% and 28% of children, having family histories of asthma and eczema respectively. 9% had a history of IBS and Coeliac disease. No differences between the sexes were observed.

Conclusion Children presenting to hospital with abdominal pain have a higher prevalence of parental smoking, eczema, asthma and migraine. There is a peak incidence in benign presentations during winter. Even in children with significant extrinsic influences, appendicitis was the third most common diagnosis, mandating thorough evaluation for all children with abdominal pain no matter the background circumstances.

PO-0909 WITHDRAWN

PO-0910 LAPAROSCOPIC INGUINAL HERNIA REPAIR IN CHILDREN: CLINICAL EVALUATION OF 46 CASES

C Berghea Neamtu. Pediatric Surgery, Pediatric Clinic Hospital, Sibiu, Romania

10.1136/archdischild-2014-307384.1531

Background Laparoscopic inguinal hernia repair in children tend to be performed routinely, with some advantages compared to conventional repair.

Aims The paper aims to assess the cases of inguinal hernia repair by laparoscopic procedure in 2 clinics of paediatric surgery from the country in the last 3 years.

Methods Were studied retrospectively the medical records from these patients.

Results Out of the 46 cases, 60,8% were younger than 7 years, 41,30% were originated from urban environment; 27 cases were bilateral inguinal hernia; 14 presented various preoperative status/comorbidities (occlusive intestinal syndrome, acute dehydration, visceral adherence), 8 various surgical complications (bleeding, anaemia, scrotal swelling); the average length of stay was 3,69 days. Laparoscopic repair was significantly more frequent in patient younger than 7 years from urban environment ($p < 0,001$), but also with significantly more frequent comorbidities ($p < 0,04$) and post surgical complications ($p < 0,003$). Unilateral inguinal hernia develop fewer complications ($p < 0,03$) and require a shorter length of stay ($p < 0,008$). The patients without comorbidities presented a significant shorter length of stay ($p < 0,05$). The absence of surgical complications shortened significantly the length of stay ($p < 0,01$).

Conclusions Laparoscopic inguinal hernia repair may be considered a safe procedure, with fewer complications and shorten length of stay.

PO-0911 HERLYN-WERNER-WUNDERLICH SYNDROME AND DISTAL VAGINAL ATRESIA. TWO PARTICULAR CASES

¹R Cavaco Fernandes, ¹E Blesa Sánchez, ¹S Sanjuan Rodriguez, ²N Fuentes Bolaños. ¹Paediatric Surgery, Hospital Materno Infantil, Badajoz, Spain; ²Paediatrics, Hospital Materno Infantil, Badajoz, Spain

10.1136/archdischild-2014-307384.1532

Background and aims Müllerian anomalies are rare, causing malformations of the female reproductive system as the Herlyn-Werner-Wunderlich Syndrome (HWWS) and distal vaginal atresia. These patients are usually asymptomatic until menarche. There may be associated with renal and urinary tract anomalies. We describe two cases of young girls with occluded vagina associated with urethrovaginal fistula.

Cases presentation The first patient is a 3-years-old asymptomatic girl with prenatal diagnosis of left renal agenesis. Ultrasonography, performed 6 months prior to consultation, identified an anechoic cyst in hypogastrium. On genital examination, distal vagina occluded by a protruding membrane over the vaginal introitus. Magnetic resonance revealed a left paravesical formation suggestive of hydrocolpos. By the transmembrane puncture, urine was aspirated. Laparoscopy confirms uterus didelphys. Membrane resection enable two hemivaginas. Based on the association of these anomalies, the diagnosis of HWWS was made. Girl present constant loss of urine and cystoureterography performed reveals urethrohemivaginal fistula. The second patient is a 4-years-old girl with occluded vagina suggesting distal atresia. Saline injected through the membrane eliminates by urethra. Cystoureterography confirms urethrovaginal fistula.

Conclusions The diagnoses of HWWS (uterus didelphys, unilateral low vaginal obstruction and ipsilateral renal agenesis) also known by OHVIRA and distal vaginal atresia in infancy and early childhood are unusual. The reported cases represent examples off premenarche diagnosis. In both patients, we detected urethrovaginal fistula, association not reported before in literature. Early diagnosis allows appropriate therapeutic management and prevents subsequent complications.

PO-0912 SHORT BOWEL STATE: DOES AUTOLOGOUS GASTROINTESTINAL RECONSTRUCTION REDUCE CATHETER-RELATED BLOOD STREAM INFECTIONS?

R Coletta, N Lansdale, BA Khalil, A Morabito. Paediatric Autologous Bowel Reconstruction and Rehabilitation Unit (Pabrru), Royal Manchester Children's Hospital, Manchester, UK

10.1136/archdischild-2014-307384.1533

Background and aims Catheter-related blood stream infections (CRBSI) occur frequently in Short Bowel Syndrome (SBS) children on parenteral nutrition (PN). Central venous catheter (CVC) complication and complete loss of central venous access are indication for intestinal transplantation. Autologous gastrointestinal reconstruction surgery (AGIR) is mandatory in any chronically PN-dependent patient when there is substantial bowel dilation to reduce bacterial translocation. We reviewed patients who underwent lengthening surgery and calculated the rate of CRBSI pre and post surgery.

Methods PN dependent children with SBS were identified. Inclusion criteria were CVC for PN administration pre and post-operatively, CVC removed after weaned off PN and having gained enteral autonomy. CRBSI episodes were defined as temperature above 38.0 °C, along with positive blood culture microbiological infection from the CVC.

Results Nineteen patients were identified (male $n = 13$). Median gestation was 35 (33.5–36.5) completed weeks and birth weight 2080 g (1725–2374). Ten patients underwent tapering enteroplasty, eight Longitudinal Intestinal Lengthening and Tailoring (LILT) procedure, and one Serial Transverse Enteroplasty (STEP) procedure. Median duration of PN was 5.3 months (2.9–6.6) pre and 9.0 months (4.2–10.9) post surgery. A total of 115 septic episodes were confirmed (70 prior to surgery and 45 post surgery). The total rate of catheter related sepsis was significantly lower after AGIR compared to before it ($p = 0.016$).

Conclusions CRBSI frequency in PN dependent patients with dilated bowel reduces after AGIR. AGIR appears associated with significantly reduced frequency of CRBSI in PN dependent children with bowel dilatation. These findings warrant further exploration in larger, preferably controlled studies.

PO-0913 A REVIEW OF CUFFED VS. UNCUFFED ENDOTRACHEAL TUBES IN CHILDREN

¹D Crankshaw, ²M Entwistle. ¹Medicine, Lancaster University, Lancaster, UK; ²Anaesthetics, Royal Lancaster Hospital, Lancaster, UK

10.1136/archdischild-2014-307384.1534

Background and aims The use of cuffed endotracheal tubes in paediatric patients is still a controversial topic. This paper aims to investigate whether cuffed or uncuffed tubes should be used in children under the age of 8 based on the literature that is currently available on this topic. Currently there are no guidelines on this topic.

Methods literature review.

Results The results of the first four studies reviewed all show significant results in favour of use of a cuffed endotracheal tube and a change in current practice. None of the studies reviewed showed that patients were more likely to suffer injury as a result of using a cuffed tube. This is important as the review covers a variety of patients including those undergoing elective operations, burn patients and those who are critically ill. All of the