Methods: A retrospective review of paediatric laparoscopic cholecystectomy over the last four years was performed at The Royal Manchester Children’s Hospital (Manchester, United Kingdom) between 9th February, 2010, and 4th February, 2014.

Results: During the study period there were 69 cholecystectomies, 47 of which were laparoscopic. The mean age of the patients was 12.7 years (range, 4–16), mean weight of 60.5 kg (range, 15.3–114.9), 66% (n = 31) were female and 34% (n = 16) were male and patients. There were no open conversions or mortality. Post operative complications were present in 6.4% (n = 3) of patients. 91.4% (n = 43) of patients received their operation within 1 day of admission.

Conclusion: Paediatric patients diagnosed with cholelithiasis and other gallbladder pathology have excellent outcomes following laparoscopic cholecystectomy at The Royal Manchester Children’s Hospital. The procedure is safe and effective when patients are placed in the hands of a paediatric surgeon.

0267: MESENTERICO-LEFT PORTAL BYPASS (Rex-shunt) OF PORTAL VEIN CAVERNOMA: ASSESSMENT OF POST-OPERATIVE CHANGES IN BODY MASS

N. Alizai, B. Chambers, A. Kishore. 1 University of Leeds, UK; 2 Leeds Teaching Hospitals NHS Trust, UK

Aim: Portal vein cavernoma (PVC) is a sequela of congenital portal vein thrombosis, a rare condition predominantly of an unknown aetiology. PVC predisposes to portal hypertension and reduced portal circulation, leading to significant growth impairment in children. The Rex-shunt restores portal blood flow by relieving pressure in the portal system. The aim of this study is to assess the significance of post-operative changes in body mass of patients over 12 months, following Rex-shunt surgery.

Methods: Four patients with PVC requiring Rex-shunt surgery were selected, and followed-up prospectively up to 12 months. The weight-for-age (z scores) were calculated pre-operatively and compared to the scores 2–3 months and 5–12 months post-operatively. A paired t-test was used to assess significance.

Results: Patients were aged 3.6 to 10.7 years (mean = 7.03). Compared to a mean pre-operative z score of 0.558, post-operatively there was an increase to 0.570 at 2–3 months (p = 0.740) and an increase to 0.815 at 5–12 months (p = 0.389). An overall decrease in z score across 12 months was observed in one patient.

Conclusion: Over 12 months, despite an increase in absolute weight, there was no statistically significant improvement in weight-for-age z scores in patients with PVC after Rex-shunt surgery.

0603: REDUCING RADIATION DOSE TO CHILDREN RECEIVING PELVIC X-RAYS AT GREAT ORMOND STREET HOSPITAL

M. Jabbal, L. Jeyaseelan. 1 Royal Infirmary of Edinburgh, UK; 2 Great Ormond Street Hospital, UK

Aim: For children receiving pelvic X-rays a gonadal shield is used to reduce the dose of radiation received and subsequent risks. However this can be difficult in some children and misplacement can lead to obscuring of essential anatomy. The aims were to assess the placement of shields and audit against placement protocol.

Methods: The protocol states every male should have a shield for every X-ray, and females must have a shield after the first. 100 Pelvic X-rays were retrospectively analysed for placement of the shield, noting if anatomy was obscured and a repeat X-ray was done. It was then noted whether this was done as per protocol, and if not why.

Results: The protocol was adhered to in 19% of cases, with reasons for deviation including shield not used, or misplaced. 6% of patients had hip anatomy covered by the shield, and 2% of patients were sent for repeat X-ray.

Conclusion: Gonad shields are poorly placed, is appreciated this can be difficult in children due to lack of cooperation or difficult positioning. Modern equipment has greatly reduced the radiation dose and brings the need for any shielding into question. This issue is currently being considered by the Radiology Steering Group.

072: SYSTEMATIC REVIEW OF SPECIALIST CENTRES VERSUS NON-SPECIALIST CENTRES IN THE MANAGEMENT OF GENERAL PAEDIATRIC SURGICAL CASES

D. Hanratty, T. Evans, J. Pollitt, M. Foster. Royal Glamorgan Hospital, UK

Aim: General Paediatric Surgery (GPS) has traditionally been provided by General Surgeons in District General Hospitals, however subspecialisation means few Consultant General Surgeons are trained in GPS. JCST guidance states all general surgeons should be trained in paediatric general surgery to ST4 level. The aim of this study is to determine whether or not outcomes from General Surgeons are equivalent to Specialist Paediatric Surgeons.

Methods: A systematic review was performed according to the PRISMA statement. The search was performed in February 2014 using PubMed and MEDLINE.

Results: Of a total of 1107 articles screened, 11 articles involving patients undergoing GPS operations by General Surgeons vs Specialist Paediatric Surgeons were included in this review. Eight studies compared appendicectomy outcomes. One study compared outcomes of inguinal herniorrhaphy. There were no studies comparing outcomes of orchidopexy or umbilical hernia repairs.

Conclusion: This unique study proves that good outcomes can be obtained in GPS by General Surgeons. Despite a paucity of individual surgeons’ results in the literature, it appears we can meet JCST guidance by trainee in GPS away from tertiary referral paediatric centres with training provided by GPS consultants.

0989: PARENT, PATIENT AND PROFESSIONAL PERCEPTION OF ISSUES FOR CHILDREN LIVING WITH A STOMAS

O. Burdall, C. Bohr, C. Spray, E. Cusick. University Hospitals NHS Trust, UK

Aim: Comparison of staff and patient perceptions of the psychosocial impact of stoma formation in children.

Methods: Thematic qualitative analysis through focus groups and interviews for school age children who have had stomas formed or reversed in the last 2 years and paediatric surgical teams.

Results: Seven children, 9 parents and 16 professionals attended focus groups or interviews with more families scheduled. Body image issues were identified by both staff and patient groups. Only one professional indentified the impact of stoma smell on toilet habits and only more senior surgeons identified stoma leaking as an issue. However, stoma bag leaks and smell were the major concerns among all patients leading to missed school and social activities. The majority of professionals also listed that technical issues, complications or skin irritation amongst the worst problems; but only 2 patients listed skin irritation as an issue despite over half having suffered with it and none ranked any surgical complications or hospital visits as major problems.

Conclusion: Families did not perceive common surgical complications as issues, possibly reflecting expectation management at pre-operative counselling. A better understanding of the psychosocial issues these children face may lead to more realistic pre-operative counselling and support of families.

1003: SYMPTOMATIC GALLSTONES IN CHILDHOOD: TRENDS IN ANTHROPOMORPHIC DATA

S. Williams, S. Adams, A. Mahomed. Royal Alexandra Children’s Hospital, UK

Aim: Obesity and female sex are strongly associated with gallstone disease as reported in adult literature. With increasing incidence of symptomatic cholelithiasis in childhood we wish to examine anthropomorphic trends in well children undergoing laparoscopic cholecystectomy for symptomatic cholelithiasis. Our aim was to review age, sex and weight for age (centile) for a single surgeon cohort of children undergoing laparoscopic cholecystectomy for symptomatic cholelithiasis.

Methods: A prospectively collected dataset of children undergoing laparoscopic cholecystectomy over a 9 year period, 2003–2012 was evaluated. Z-scores were calculated from weight and age at surgery from 1990 UK
anthropomorphic data. Linear regression was performed using SPSS 10.0. Statistical significance was taken as p < 0.05.

Results: 33 patients’ data were recorded. 9 were excluded due to chronic illness. Mean age 14.3 years (SD 2.0). F:M ratio 3:1, (18/24). Mean weight Z-score 1.82 (SD 1.36), this equates to the 96.6th centile (98.7th Female, 70.5th Male). There was no significant change in weight Z-score over time (p = 0.69) or by age at surgery (p = 0.91).

Conclusion: This prospective case series supports the hypothesis that previously well children presenting with symptomatic gallstones are likely to have significantly elevated weight for their age. Additionally, female sex strongly predisposes to symptomatic gallstones.

Posters: Plastic Surgery

0215: COMPLICATION RATES FOLLOWING AUGMENTATION MAMMOPLASTY IN PATIENTS REGISTERED AT A WAKEFIELD GENERAL PRACTICE SURGERY: A 21-YEAR ANALYSIS USING THE CLAVIEN DINDO CLASSIFICATION

A. Thacoor. Pinderfields Hospital, UK

Aim: Augmentation mammoplasty is a commonly performed surgical aesthetic procedure. Complications are frequently encountered post-operatively, with a number of patients requiring re-operation. This study aims at investigating post-operative complication rates in patients registered at a general practice surgery over a 21-year period.

Methods: A retrospective review of an electronic patient database was undertaken. Patients registered at Chapeltorpe Medical Practice, Wakefield, who underwent augmentation mammoplasty between January 1992 and December 2013 were included. The primary objective was to investigate complication rates using the Clavien-Dindo Classification.

Results: A total of 34 patients who underwent bilateral augmentation mammoplasty were included (34 Females, Mean age 31 years (range 19–60 years)). Two patients underwent implant change due to purely personal aesthetic preference. Three patients (8.8%) experienced significant post-operative complications (Clavien-Dindo Grade III): One case of ruptured expander, one case of surgically drained breast seroma and one case of capsular contracture requiring capsulectomy were reported. Mean follow-up time was 252 weeks (range 40–681 weeks).

Conclusion: Augmentation mammoplasty is a safe procedure associated with a relatively low risk of post-operative complications. The small sample size and retrospective nature of this study are recognised limitations. Further prospective studies including larger sample sizes are recommended to validate our results.

0231: MANAGEMENT OF OPEN LOWER LIMB FRACTURES AT RSUH: AN AUDIT OF COMPLIANCE WITH NATIONAL BOA/BAPRAS GUIDELINES

B. Rymer*, R. Choa, S. Huq. Royal Stoke University Hospital, UK

Aim: To assess concordance with national BOA/BAPRAS guidelines on management of open lower limb fractures at Royal Stoke University Hospital.

Methods: All patients admitted with open lower limb fractures from January 2013–July 2014 were included. Data was gathered from notes and endpoints based on the BOA/BAPRAS standards for the management of open fractures of the lower limb document.

Results: Forty-two patients were identified. 30 males and 12 females (average age of 47). Full data was gathered on 38. Five were partially excluded due to initial treatment at other hospitals. Twenty-three of 33 patients (70%) initially debrided at RSUH were operated on out-of-hours, with only 4 (17%) having indications for urgent intervention. A plastic surgeon was initially present in 55% of cases. Twenty cases (56%) had definitive bony fixation/soft tissue cover within 7 days of injury (range 2–51 days). Median time to cover was 10.9 days. All stages of antibiotic guidelines were correctly applied in 0%.

Conclusion: There remains scope for improvement across several areas in relation to these national guidelines at RSUH. Current literature implies a similar pattern in other units. Expansion of this audit to a multi-centre, national study is underway and initial findings will be discussed.

0271: CAT BITES TO THE HAND: A PATIENT REVIEW AND MANAGEMENT AUDIT

D. Pettitt*, R. Anantharanjit, J. Gill, F. Urso-Baiarda. Wexham Park Hospital, UK

Aim: Cat bites account for up to 15% of animal bites and although less common and destructive than dog bites, they are more frequently complicated by infection – in up to 50% of cases. We examine patient demographics, morbidity and management of patients presenting to a busy regional plastic surgery unit.

Methods: Patients treated at our institution over the last 12 months for cat bite injuries to the hand were retrospectively reviewed. Admission documents and operative records were obtained. Data regarding key demographics and management interventions were collected.

Results: Thirty patients were identified with a male: female ratio of 60:40. Sixty-seven percent (n = 20) required hospital admission with a length of stay ranging from one to seven days. Twenty-two patients required formal washout and debridement in theatre. Pasteurella multocida was the most commonly isolated organism.

Conclusion: Cat bite injuries have a considerable medical, social and economic impact on the health service and a high index of suspicion is required to effectively deal with such injuries. We recommend a practical guideline for the management of such injuries.

0320: MIDDLE PHALANGEAL FRACTURES OF THE HAND: FACTORS INFLUENCING OUTCOME

K. Mason, A. Baydoun, A. Ghanem, E. Theodorakopoulou*, M. Marti-Puenti, F. Iwuagwu. St Andrews Centre for Plastic Surgery and Burns, UK

Aim: Phalangeal fractures of the hand may cause functional disability from malunion or stiffness. Outcomes depend upon variables including fracture characteristics, treatments, and patient factors. This study assessed treatment, outcomes and patient factors following middle phalangeal fractures for patients at a regional referral unit.

Methods: All patients treated for middle phalangeal fractures at our unit from January 2011 to December 2012 were included. Fracture type, treatment modality, patient characteristics, hand-physiotherapy assessment and complications were recorded.

Results: A total of 38 middle phalangeal fractures in 37 patients were treated. Four patients were lost to follow-up. Functional results were excellent in 10/33 cases, good in 11/33, fair in 4/33, and poor in 6/33. By regression analysis, old age, comminuted and open fractures are statistically associated with poor and fair results. Gender and type of surgical treatment did not influence the outcome.

Conclusion: Functional restoration following middle phalangeal fractures requires accurate skeletal realignment and rehabilitation. Our study shows that an older age, and open or comminuted fractures are associated with poorer outcomes. Patients with these factors may benefit from a prolonged rehabilitation in order to achieve optimum functional results.

0341: CHARACTERISTICS AND OUTCOMES OF SELF-INFlicted VERSUS ACCIDENTAL BURNS

O. Ali*, A. Farroha. Queen Elizabeth Hospital, UK

Aim: Self-inflicted burns are complex. They require intense management in hospital and the community. The aim is to determine the differences in characteristics and outcomes of self-inflicted compared to accidental burns.

Methods: A single regional burns centre performed a retrospective analysis on data obtained from the International Burns Database from April 2013 to March 2014. Statistical analysis was performed on demographics, burn characteristics and overall mortality of all acute burn admissions via self-inflicted or accidental modes.