bilateral subdural collection. He was assessed at 10 month of age and found to have no residual disabilities.

**Conclusion** VZV infection complicated by meningococcal sepsis and meningitis is well reported in the literature; subdural empyema is reported on few occasions; however we found no report with all these complications in a single patient nor in an infant.

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**575** Iliopsoas Abscess in the Neonate with Immunodeficiency

**Background** Necrotising Fasciitis (NF) is primarily an adult disease but there are pediatric case series also. In the neonate, most cases of NF are attributable to secondary infection of omphalitis, balanitis, mammitis, postoperative complications, and fetal monitoring. Other associations of NF included necrotizing enterocolitis, immumammitis, postoperative complications, and fetal monitoring.

NF are attributable to secondary infection of omphalitis, balanitis, but there are pediatric case series also. In the neonate, most cases of NF are attributable to secondary infection of omphalitis, balanitis, mammitis, postoperative complications, and fetal monitoring.

Method

Other associations of NF included necrotizing enterocolitis, immumammitis, postoperative complications, and fetal monitoring.

Results

He was treated with a 3 week course of IV cefotaxime & benzylpenicillin and was commenced on oral pencillin prophylaxis for 3 months. Localised scrotal skin breakdown noted on day 11 with a rapidly progressive inflammation, necrosis and gangrene skin subcutaneous tissues. Regular dressing with duoderm, supportive care and I.V antibiotic has resolved necrotising fascitis with residual scar.

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**576** Genital Necrotising Fascitis in a Premature Neonate Secondary to Group B Streptococcus (GBS) Sepsis

**Abstract 576 Figure 1**

**Conclusion** We report the first case in literature of Genital Necrotising Fascitis in premature baby with Group B Streptococcus sepsis and meningitis. It is relatively rare and has a fulminant course with a high mortality rate. We had good result with IV antibiotic, supportive care and conservative surgical management.

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**577** Occipital Encephalocele: Report of Case Series

An encephalocele results from failure of the surface ectoderm to separate from the neuroectoderm. The prevalence ranges from 0.8 to 4 per 10,000 live births. The occiput is the most common site. During a 3 years’ period 5 babies with occipital encephalocele were evaluated. All babies were girls. One mother was 45 years old, the others were around 25 years-old. All babies were born with cesarean sectio. Maternal folic acid (FA) consumption revealed that only 2 mothers used FA irregularly, not beginning preconceptionally. The
Abstracts

578 SEVEN DAY ANHEPATIC SURVIVAL IN A 19 MONTH OLD CHILD, AN INTERDISCIPLINARY CHALLENGE
doi:10.1136/archdischild-2012-302724.0578

H Ringe, V Varholt, W Luck, G Puhl. Paediatric Intensive Care; Paediatric Gastroenterology; Department of General, Visceral, and Transplantation Surgery, Charité Campus Virchow, Berlin, Germany

Objective Description of pediatric intensive care and surgical management in a 19 month old child after primary liver-graft-non-function, who was managed anhepatic for 8 days in total and re-transplanted twice.

Case Report A 19 month old boy, 10 kg bodyweight, with ALF of unknown origin received an adult left liver lobe. After all vessels were connected and re-opened the graft showed a massive swelling and perfusion failure due to fulminant micro-vascular rejection and was removed immediately. The portal vein was attached end-to-side to the cava inferior. Thereafter diffuse intra-abdominal bleeding occurred, requiring PPSB, factor VII, mass-transfusion and tranexamic-acid and the child was admitted to PICU sedated and ventilated.

To maintain ammonium, bile acids, bilirubin, and cerebral perfusion within thresholds continuous-single-pass-albumin-dialysis (SPAD) on turnover rates up to 150 ml/kg/h of hemodiafiltration/-filtration was used in total to bridge the anhepatic boy to his first (7 days) and second re-transplantation (1 day). Fresh-frozen-plasma to avoid hemorrhage, water-soluble vitamins, and amino-acids were continuously replaced.

Overall 16 surgical interventions (increased intra-abdominal pressure, portal vein kinking, portal and arterial thrombosis (second graft), removal of mesenteral lymphoid cysts, bile-duct-leak, second re-transplantation with cavo-portal anastomosis, and secondary abdominal wall closure with dermal-porcine-collagen, skin-mesh-grafts) and anticoagulation with argatroban were needed to save the boy.

During the 6 month total hospital stay, including 6 weeks on mechanical ventilation, multiple bacterial, viral and fungal infections were detected that required early and timely antimicrobial treatment.

At 1.5 year follow up the child was alive with intact graft and showed no neurologic sequelae.

579 CENTRAL VENOUS CATHETER COLONISATION AND CATHETER RELATED SEPSIS: LESSONS LEARNT FROM EXIT SITE SKIN SWAB
doi:10.1136/archdischild-2012-302724.0579

V Ponnusamy, V Venkatesh, A Curley, A Pereroghou, N Brown, C Tremlett, P Clarke. Neonatal Intensive Care Unit, Norfolk and Norwich University Hospitals NHS Foundation Trust, Norwich; Neonatal Intensive Care Unit, Cambridge University Hospitals NHS Foundation Trust, Cambridge; Norwich Medical School, University of East Anglia, Norwich; Clinical Microbiology, Cambridge University Hospitals NHS Foundation Trust, Cambridge; Department of Microbiology, Norfolk and Norwich University Hospitals NHS Foundation Trust, Norwich, UK

Background and Aim Percutaneous central venous catheters (PCVCs) are commonly inserted in neonates after topical antiseptic. Presence of a PCVC is a risk factor for catheter-related sepsis (CRS). We examined the relationship between bacteriology of exit site skin swabs (ESSS) taken at line removal and line colonisation/CRS.

Methods For all PCVCs removed, ESSS and three separate PCVC segments (proximal, middle and tip) were sent for bacteriological culture. For clinically-septic neonates a peripheral blood culture was additionally obtained. PCVC colonisation was defined as a positive growth in any PCVC segment from a well neonate. Definite CRS was defined as positive growths with the same organism in any PCVC segment plus the blood culture from a clinically-septic neonate.

Results ESSS were culture-positive for 39/187 (21%) lines removed. Univariate analysis showed that with a positive ESSS, line colonisation was 8 times higher (log odds ratio 2.13 [95%CI: 1.18–3.08], p<0.001), and definite CRS was 14 times higher (2.63 [1.14–4.14], p<0.005). Adjusting for various covariates, multivariate analysis using a logistic regression model confirmed an increased risk of CRS with a positive ESSS (log odds ratio 2.00 [95%CI: 0.44–3.58], p<0.01).

Conclusion Positive ESSS correlate strongly with PCVC-colonisation and definite CRS. Improved topical antiseptic, skin and catheter care is required to reduce the risk of colonised skin insertion sites associated with catheter placement, and the consequent risks of line colonisation and subsequent CRS.

580 A SYSTEMATIC APPROACH TO PREVENTING CENTRAL VENOUS CATHETER-ASSOCIATED BLOODSTREAM INFECTION IN PATIENTS RECEIVING HOME PARENTERAL NUTRITION
doi:10.1136/archdischild-2012-302724.0580

J Gray, C Holden, E Sexton, S Pearce. Department of Microbiology; Nutrition Care; Infection Control, Birmingham Children’s Hospital NHS Foundation Trust, Birmingham, UK

Background and Aims Central venous catheter-associated bloodstream infection (CBSI) is a serious complication in home parenteral nutrition (HPN) patients. Prevention of CBSI in hospitals is well-established, but in the home environment presents additional challenges. We applied hazard analysis and critical control points principles to develop a systematic approach to preventing HPN-related CBSI. Here we describe the corrective actions and their clinical impact.

Methods Factors predisposing to infection, and corrective actions were identified through consensus by a multidisciplinary group of healthcare professionals between April and June 2012. The impact of these actions on CBSI was observed.

Results Key corrective actions were:

1. Staphylococcus aureus nasal screening and decolonisation where appropriate.
2. Multidisciplinary discharge planning meetings included consideration of patients’ microbiology histories and optimisation of treatment of comorbidities (e.g. atopic eczema).
3. Increased monitoring of line access and care practices at home, aiming to attain the same standards as in hospital.
4. Launch of updated illustrated guide to identification and management of line site problems.
5. Streamlining of microbiology result reporting to facilitate early treatment of local infections.
6. Tauruloidine locks for one patient with a poor line infection history.

Between April 2011 and March 2012 there were 13 CBSI acquired outside hospital, and during planning and implementation of corrective actions (April–June 2012) there were 4 CBSI. By contrast there was only one CBSI during the in the nine months following full implementation.