PO-0979 IMPROVING PATIENT SAFETY IN PAEDIATRIC HANDOVERS

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Background and aims The implementation of European working time directive and shift patterns of working has highlighted the importance of good handovers in Paediatrics. Current guidance from RCPCH and GMC stress the importance of good handovers. We present a closed loop audit cycle of handover practice, process mapping, the organisational strategies which resulted in use of standardised handover proformas, reducing potential for clinical errors and improved handovers in a district general hospital (~4000 paediatric inpatients a year).

Methods Data was collected assessing the handover process using 19 parameters, which included - timing, duration, structure, documentation, facilities and facets of clinical care, over a 2 week period. Changes were introduced following the audit and a re-audit was carried out with same parameters.

Results 604 patients were handed over in 2 weeks (32 handovers) during the initial audit. 69% of handovers were delayed greater than 5 min and finished beyond the designated time on 50% occasions. Average duration was 25 mins with 17 interruptions during 2 week period.

Changes were implemented following the audit, which involved organisational strategies:

- Safety briefing
- Handover proceedings sheet
- Structured handover sheet
- Training sessions
- SBAR handover tool

Bleep free period for handover (except emergencies)

The re-audit showed significant improvement in all parameters monitored and resulted in improved patient safety and quality of care.

Conclusions The use of structured handover format and the above organisational strategies has resulted in improvement in the efficacy and efficiency of data transfer during patient handover and good clinical documentation, resulting in improved patient safety and quality of care.

PO-0980 STIGMA AND PARENTAL HELP-SEEKING FOR CHILD BEHAVIOUR PROBLEMS: COMPARISON BETWEEN URBAN AFRICAN AMERICAN AND RURAL EUROPEAN AMERICAN PARENTS IN THE UNITED STATES

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Objective Significant numbers of U. S. children have diagnosable mental health problems, but only a small proportion of them receive appropriate services. The current study aims to understand factors, including stigma, associated with parents' help-seeking behaviour related to child behaviour problems and to determine if there are cultural differences in those factors.

Method Participants were the parents and/or legal guardians of children ages 3–8 years recruited from primary care settings in 2 locations within the U. S. One group was Caucasian (n = 128)

from a rural area and one group was African American (n = 101) from an urban location. Variables included child behaviour, stigma (self, friends/family, and public), object of stigma (parent or child), obstacles for engagement, intention to attend parenting classes, sources of and preferences for parenting advice, and demographics.

Results Parents perceive stigma associated with child behaviour problems and there were differences between the groups on the types of stigma, the object of the stigma, and the relationships to help-seeking. Group differences were also found regarding the sources of and preferences for parenting advice.

Conclusions Parent stigma should be considered in the design of care models to ensure that children receive appropriate and timely preventative and treatment services for behavioural/mental health problems.

PO-0981 A NOVEL MUTATION OF IPEX SYNDROME IN A PAEDIATRIC PATIENT

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Background Immunodysregulation, polyendocrinopathy, enteropathy, X-linked (IPEX) syndrome is a rare disorder characterised by multiple autoimmunity. Mutations in the fork head box P3 (FOXP3) gene, in chromosome Xp11.23, result in reduced numbers or a complete absence of CD4⁺ regulatory T (Treg) cells and therefore in a variety of clinical presentation.

Methods We present the case of a 3-year old male with clinical and laboratory findings of IPEX and a novel mutation of the FOXP3 gene.

Results A 3-year Chinese male was admitted to the 3rd Clinic of the First Paediatrics of University of Athens, Greece, due to critical malnutrition. Severe diarrhoea and malabsorption were the predominant symptoms; therefore the administration of long term TPN was essential. The patient underwent a colonoscopy which revealed autoimmune enteropathy, while Diabetes type I, the other major clinical finding, required strict dietary program and insulin administration. Our patient was set on steroids and azathioprine, which was withdrawn however due to cholestasis on day 107.

Patient's laboratory findings were constant with immunodeficiency (low immunoglobulins IgA and IgM), nevertheless, the flow cytometry revealed normal number of CD4⁺/CD25⁺ regulatory cells.

Under the strong suspicion of IPEX syndrome, a molecular analysis was performed and a novel mutation, c.1161G-p. H387Q in FOXP3 gene was identified, confirming the diagnosis.

Conclusions A total of 13 allelic variants in FOXP3 have been described so far, leading into different phenotypes of IPEX syndrome. The genetic variant c.1161G has been associated with hepatocellular carcinoma in Chinese population, but has never been reported in IPEX syndrome.

PO-0982 THE IMPACT AND IMPORTANCE OF EARLY DIAGNOSIS OF POSTERIOR ANKYLOGLOSSIA: A CASE SERIES

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Background Ankyloglossia is a developmental anomaly causing restricted tongue mobility. Posterior types are usually identified latest and least commonly. Currently, there are no standardised national/international guidelines for diagnosis. This case series aims to highlight the importance of early diagnosis to reduce cases identified only following significant morbidity.

Methods Over a 2 year period, consecutive patients diagnosed with posterior ankyloglossia were identified.

Results Of the 15 patients identified, mean age at diagnosis was 24 days (range 4–42). 8(53%) had regained their birthweight however, for 3(38%) of these, weight gain was slow/inadequate. The remaining 7(47%) had lost weight with a mean weight loss of 8.54% (range 2.56–16.06). 13(86%) were exclusively breastfed, 1(7%) both breast- and formula-fed, and 1(7%) formula-fed. Presenting features included poor latch (60%), weight loss (47%), sore nipples (40%), irritability (40%), poor weight gain (20%), increased feed duration (20%), and lethargy (20%). 9(60%) were diagnosed by breastfeeding co-ordinators, 4(26%) by community midwives, and 1(7%) each by a paediatrician and neonatal nurse. All patients underwent a frenotomy following which both weight gain and feeding improved in 11(73%). Behavioural improvements were noted in 8(53%). 11(73%) mothers felt their baby's symptoms had improved. All of the 6 mothers who initially described symptoms of their own reported improvement.

Conclusion For many infants, posterior ankyloglossia is often detected only once feeding has deteriorated enough to result in significantly poor weight gain or weight loss. To prevent this and other morbidities shown in this small case series, a standardised assessment tool may be a useful method to facilitate earlier diagnosis and improve clinical practice.

PO-0983 VIROLOGY ASSOCIATED WITH LUNG CONSOLIDATION IN INFANTS AND CHILDREN WITH ACUTE BRONCHIOLITIS

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Background Bronchiolitis, a lower respiratory tract infection that primarily affects the small airways (bronchioles), is a common cause of illness and hospitalisation in infants and young children. Although several Studies suggest that radiographs in children with typical bronchiolitis have limited value, chest x ray still performed on routine basis. There is limited data regarding which viral-associated bronchiolitis has the highest rate of consolidation on a Chest Radiograph.

Aim The purpose of our study is to determine which virus inducing bronchiolitis has the highest rate of consolidation of a chest radiograph.

Methods A retrospective and descriptive study was conducted at Hamad Medical Corporation (HMC).

Infants and children ages 0 to 18 months hospitalised in our paediatric unit with acute bronchiolitis from October 2010 to March 2013 were included in the study. The following data were collected: age at diagnosis, sex, *direct fluorescent antibody* (DFA) and results of chest radiograph.

Results The study comprised of 838 infants, median age 3.6 months, and boys constituted 60% of total infants. 606 infants and children had a routine chest radiograph done in the paediatric emergency centre prior to admission. n = 226, 37.3%,

showed normal findings on chest radiographs, while n = 380, 62.7% showed consolidations. 70 chest radiographs (18.4%) with consolidation were attributed to infants and children with bronchiolitis and negative DFA.

The results of positive DFA associated with consolidation on chest radiograph were as follow:

Respiratory Syncytial Virus (RSV) 161, 42.4%; rhinovirus 68, 17.9%; Human metapneumovirus (hMPV) 25, 6.6%; parainfluenza virus (type1) 3, 0.8%; parainfluenza virus (type 2) 2, 0.5%; parainfluenza virus (type 3) 15, 3.9%; parainfluenza virus (type 4) 4, 1.1%; coronavirus 11, 2.9%; adenovirus 10, 2.6%; enterovirus 3, 0.8%; bocavirus 5, 1.3%; H1N1 2, 0.5%; Influenza virus B 1, 0.3%. There was no statistically significant difference relating chest consolidation with DFA status, p = 0.773

Conclusions Bronchiolitis can be triggered by a diversity of respiratory viruses that appear similar on a chest radiograph; therefore, chest imaging is not routinely required in the initial management of bronchiolitis unless the diagnosis is uncertain.

PO-0984 ASTHMA: A DIAGNOSTIC DILEMMA

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Asthma is one of the most common chronic conditions with 1.1 million children experiencing asthma in their childhood. Much of the related morbidity is due to poor management, particularly the under use of preventative medicine.

This was a collaborative participatory study aimed at identifying where along the asthma pathway resources needed to be focused to improve asthma management. Interviews and focus groups were used to explore barriers to optimal asthma management with communities, children, families and healthcare professionals (HCPs). Key themes were drawn from the data, prioritised and translated into an intervention.

Diagnosis was identified as the key priority and one that all parents/carers felt needed to be addressed first, although it was considered a low priority to HCP. For parents there was confusion surrounding the diagnostic process, and the label of asthma itself. The diagnostic process also raised concerns, with some HCPs being reluctant to diagnose or suggesting that some children may be 'too young to diagnose'. Parents and carers reported problems with delays in treatment following a diagnosis, and inconsistent information being provided at the point of diagnosis. To improve the diagnostic process, a multifaceted, integrated intervention programme was developed.

This study highlighted that 'getting a diagnosis' was a priority. The disparity in priorities between HCPs and families around 'getting a diagnosis' emphasises the importance of working collaboratively with families as well as HCPs to ensure that key priorities, for service users and providers, are understood and addressed appropriately.

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