# Poster abstracts

### PO-0142 100 CASES OF NEONATAL CHOLESTASIS

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Introduction The diagnosis of neonatal cholestasis (NC) is urgent in order to define a specific diagnosis, as well as, for the immediate treatment with vitamins' supplements.

Objectives Understand the modification of NC aetiology in a tertiary centre, throughout 17 years.

Determine age at diagnosis, aetiology, hepatic function, need of imaging studies and hepatic biopsy.

Methods Retrospective study of newborns and infants with NC diagnosed in a central hospital.

Results During 17 years, were diagnosed 100 cases of NC. Median age at diagnosis was 9,5 days. The most frequent causes of NC were premature newborns under prolonged parenteral nutrition (34%), neonatal sepsis (29%), alpha-1 antitrypsin deficiency (5%) and cytomegalovirus congenital infection (5%).

From those that due to jaundice, realised abdominal ultrasound to exclude biliary atresia (n = 59), 3 had biliary atresia and 9 had other alterations. Hepatic biopsy has been performed in 7 cases (biliary atresia n = 3; paucity of biliary ducts n = 1; Byler n = 1; Morsier's syndrome n = 1, idiopathic n = 1).

Thirteen patients died, 5 developed chronic hepatitis and 2 were transplanted.

Death occurred in those with neonatal sepsis (n = 4), premature newborns with prolonged parenteral nutrition (n = 4), Zellweger syndrome (n = 2) and liver failure (n = 3).

Conclusions The majority of NC occurred in newborns and infants hospitalised in intensive neonatal unit care, due to neonatal sepsis/prolonged parenteral nutrition, in opposed to the classic aetiology of biliary atresia/ alpha-1 antitrypsin deficiency.

The celerity of NC diagnosis continues to be crucial, in order to avoid delay in a biliary atresia diagnosis.

## PO-0143

IMPROVING TIME TO DIAGNOSIS IN CHILDREN REFERRED LOCALLY WITH SUSPECTED INFLAMMATORY BOWEL DISEASE WITHIN A MANAGED CLINICAL NETWORK - A SINGLE CENTRE. SECONDARY CARE EXPERIENCE

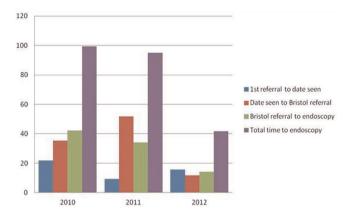
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All children with suspected inflammatory bowel disease (IBD) should undergo endoscopy to confirm diagnosis, requiring referral from secondary unit to a tertiary paediatric unit. Delay in diagnosis can occur at three stages:

- Referral from primary care,
- referral to tertiary care,
- · securing tissue diagnosis.

Children presenting to the Royal Cornwall Hospital (RCH) in Truro are referred to the Bristol Royal Hospital for Children (BRHC). Good working relationships between RCH and BRHC mean that the majority of referrals for suspected IBD go



Abstract PO-0143 Figure 1

"straight to endoscopy" rather than initial clinical review. A review of the literature did not find previously set standards against which to assess time to diagnosis.

Index cases with IBD diagnosed 2010-2012 were identified from the gastroenterology clinic. Case notes were reviewed retrospectively to establish time to tissue diagnosis. Patients were then grouped by year for further analysis.

Over the 3 year period, through excellent working relationships between RCH and BRCH the total time to endoscopy and therefore diagnosis was reduced by more than 50%, from 99 days to 41 days. Individual cases with longer referral times were reviewed to look for avoidable factors. Referral pathways between surgeons or general paediatricians to special interest paediatrician were refined.

This study has highlighted the need to review such data, demonstrating areas of good practice as well as those requiring improvements. With this in mind, and in the absence of relevant benchmarks we propose other units collect this data, so that analysis and service improvement may occur on a national scale.

#### PO-0144

## TRIGLYCERIDES/GLUCOSE INDEX IN OBESE CHILDREN AND ADOLESCENTS

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Background and aims Triglycerides-glucose index (TyG index) has been associated with homeostatic model assessment (HOMA) index in healthy adults; this might be useful in identifying individuals at high risk of developing diabetes. Moreover, TyG-index has been related to Triglycerides/HDL ratio and carotid atherosclerosis, indicating strong validity to assess cardiovascular risk. (Lee SH et al 2014, Irace C et al 2013).

The primary aim of this study was to assess the TyG in obese children and adolescent.

Methods Two hundred sixty-eight obese children and adolescents (Cole TJ et al 2000), mean (SD) age 10.05 (1,82) years, were studied. Anthropometry, fasting glucose and insulin, lipid profile were evaluated. HOMA and TyG index were calculated as following, respectively: [fasting Insulin (µU/l) x fasting glucose (mmol/l)]: 22.5; Ln[fasting triglycerides (mg/dl) x fasting glucose (mg/dl)/2] (Simental-Mendía LE et al 2008). Insulin resistance has been defined as HOMA Index > 95°p for sex and pubertal stage (D'Annunzio G et al. 2009).