- Appropriate reduction in laboratory investigation 2018 vs 2020 (both by surgical team from 90% to 58% and Paediatric team from 43% to 17%)
- Optimization of imaging resources by surgical team from 33% to 17%
- 88% of patients with abdominal pain had a medical diagnosis at discharge.

Conclusion:

- Abdominal pain is a common presentation in the paediatric population, mostly benign and self-limiting.
- Abdominal pain should be assessed by General Paediatrician first and then referred to surgical colleagues to avoid unnecessary investigations and imaging and improve timeliness of their assessment.

British Academy of Childhood Disability

158 TRIHEXYPHENIDYL FOR TREATMENT OF DYSTONIA IN CHILDREN WITH NEWLY DIAGNOSED CEREBRAL PALSY: A RANDOMIZED PLACEBO-CONTROLLED TRIAL

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Background Cerebral palsy is a common and a lifelong disabling neurodevelopmental disorder, we attempted to address the relative lack of evidence on the role of Trihexyphenidyl in the management of dystonia in children with cerebral palsy

Objectives To study the short-term effect of trihexyphenidyl on dystonia and motor functions in children with newly diagnosed Cerebral Palsy.

Methods A randomized, double-blinded, placebo-controlled, parallel-group trial was conducted in consecutive children aged 6 months-5 years at a tertiary care hospital. Following baseline evaluation, the study participants were randomized into two groups and were started on medication. Assessments were performed at baseline, 3, 6, and 12 weeks. A total of 50 children completed the study.

Results After 12 weeks of medication, statistically significant improvement in median scores of GDS was seen in 10 body regions in the intervention group as compared to only 4 body regions in the control group and significant improvement in GMFM 88 in both the groups. The motor status assessed using GMFCS showed that there was a reduction in GMFCS level in 4 children in the intervention group as compared to 1 child in the control group. DQ calculated using EDP-2 showed a significant change in the intervention group (p-value 0.026) at the end of 12 weeks but no change in the control group (p-value 0.218). However, no statistically significant difference was seen in the median change in outcome scores between the two groups.

Conclusions This study could not document a statistically significant change between the two groups for the effect of trihexyphenidyl. A larger placebo-controlled trial, preferably multi-centric and with a longer follow-up period is needed to provide definitive results regarding the place of trihexyphenidyl in the management of dystonia in children with Cerebral Palsy.

British Society of Paediatric Endocrinology and Diabetes

159 THE RISE OF DISORDERED EATING PATTERNS IN PAEDIATRIC DIABETES: A LITERATURE REVIEW

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Background Type 1 Diabetes Mellitus (T1DM) is one of the most common chronic childhood illnesses, with life-long implications for the child or young person (CYP). A preoccupation with food, eating and weight, integral to optimal diabetes care, coupled with a peak diabetes onset in early adolescence, inevitably increases the propensity of this cohort to develop disordered eating behaviours (DEB) and/or eating disorders (ED). Current UK diabetic services grossly underestimate the problem with our own service capturing only a 0.08% ED rate among 620 CYP with T1DM across three trusts, compared to study prevalence rates ranging from 10–30%. This discrepancy urgently needs addressing so CYP vulnerable to DEB/ED can be identified and offered appropriate therapeutic interventions.

Objectives The aim of this literature review is to identify, summarise and critically appraise works evaluating the development, impact and management of DEB/ED in paediatric diabetes, with the hopes of increasing awareness of a clinically important, but scarce discussed phenomenon.

Methods A search was conducted on Embase, MEDLINE and PsycINFO for studies concerning T1DM, ED/DEB and CYP, published between 2000 and 2020. Cross-referencing searches were conducted for articles not detected in the original keyword search; key national guidelines and diagnostic criteria were also reviewed.

Results 35 studies met the inclusion criteria. T1DM was shown to be a key contributor to the complex and multifactorial aetiology of DEB/ED. The majority of studies showed increased DEB/ED among CYP with T1DM compared to their peers, and where they did not, rates of sub-threshold ED were still higher. Studies were limited by small sizes, variable DEB/ED definitions, cohorts extending to young adult populations, participant recall bias and diverse screening tools, ranging from generic ED surveys to diabetes-specific measures, which though showing greater sensitivity, made control comparisons more challenging. Only 9 intervention trials were included, exploring a range of strategies from family therapy, nutritional psychoeducation, individual and group cognitive behavioural therapy (CBT), and inpatient stays. All strategies emphasised the need for a collaborative approach between medical and psychiatric teams. The detrimental impact of DEB/ED on quality of life, metabolic control, secondary complications, and life expectancy, only highlighted the necessity of timely therapeutic intervention.

Conclusions Disordered eating can be a significant problem in T1DM, beginning in early pre-teen years, becoming more prevalent in adolescence and often extending into adulthood, where it becomes significantly more challenging to manage. In the first instance, we must begin to identify risk factors for disordered eating in our diabetic clinics; referring those we are concerned about for a more rigorous psychological assessment. The gold standard, time and financial pressures permitting, would be for universal screening from age 10, with a

diabetes-specific tool, in order to provide early and preventative psychological interventions for those at risk, and active management strategies for identified sufferers, including the provision of dual medical and mental health inpatient facilities for those most affected.

Paediatricians with Expertise in Cardiology Special Interest Group

168 PATENT DUCTUS ARTERIOSUS: PRESENTATION AND OUTCOMES (SINGLE OPERATOR EXPERIENCE)

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Background Key facts regarding patent ductus arteriosus (PDA):

- Incidence is 1 in 2000 in term infants
- Has female preponderance
- Presents in 60% of preterms (<28wks gestation) and may have medical or surgical treatment
- Spontaneous closure is rare in full-term infants and children

In our District General hospital (DGH), all the referrals for paediatric echocardiography (from the paediatric unit, the neonatal unit, outpatient clinics, and primary care) to one of the three paediatricians with special interest in cardiology were analysed. Within our cohort we looked at the most common presenting symptoms, age at referral, referral source, and management outcome of those who eventually had patent ductus arteriosus diagnosed on echocardiography.

Objectives To ascertain for paediatric patients eventually diagnosed with PDA with echocardiography, what was the:

- Commonest presentation at referral
- Main age group referred for echocardiography
- Eventual outcome

Methods Sample Period: 01/01/2009 – 02/02/2019

Inclusion Criteria: All paediatric referrals for Echocardiography (single operator)

Relevant Sample Size: 84

Data Collection: Retrospective from:

Cardiac database

Electronic patient management system

Clinic letter

Referral letters (to single operator and/or tertiary centre)

Discharge summaries

Validation: Use of Pro-forma

Exclusion Criteria: Patients who had any cardiac defect (isolated or in combination) on Echo other than PDA

Excel spreadsheet used for data collection and analysis

Results 70% of the patients referred for echocardiography were less than 28 days of age, 18% between 28 days and 1 year old, and the remaining 12% above 1 year old.

51% cases were referred from our neonatal unit, 18% from postnatal wards, followed by 12% referrals from primary care physicians. 9.5% cases were incidentally picked up on clerking when patients presented to our DGH with another complaint. The remainder were referred from Paediatric outpatient clinics.

64% of patients with PDA were noted to be preterm at birth. Nearly three quarters of patients had continuous

machinery murmur when referred. 11% had Trisomy 21 as a reason for referring. 7% were asymptomatic and referred for screening because of family history (Di George or Hypoplastic left heart syndrome). Failure to thrive was the presenting feature in 1%, while 2% presented with cardiac failure.

70% PDA were isolated defects.

38% PDA self closed, while 42% required intervention (coil or surgical ligation). A further 9% were lost to follow up, 1% deceased, with 10% still under regular follow up at the DGH.

Conclusions

- Female preponderance in patients with PDA.
- Most cases of PDA presented with a pathognomonic machinery murmur.
- Some cases were silent, with incidental discovery on echocardiograms.
- Occasional cases beyond neonatal period (during infancy) presented in heart failure or faltering growth.
- Nearly half the cases needed intervention to close the PDA, with most not needing surgical ligation.

Young People's Health Special Interest Group

174 TEENUNDATED- IMPROVING UNSCHEDULED CARE OF 14–16 YEAR OLD YOUNG PERSONS ON A GENERAL PAEDIATRIC UNIT

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Background Our District General Hospital increased the upper age limit for paediatric admissions from 14 years to 16 years in 2019-possibly among the last to do so in the United Kingdom.

Objectives

1. To identify the clinical profile of young persons aged 14 years and over admitted to a paediatric unit in a District General Hospital over a 1-year period.
2. To identify training and service provision gaps around care of 14–16 year olds admitted under the paediatric medical team

Methods

1. Clinical features of patients aged 14 years and above admitted under the paediatric medical team between May 2019 and May 2020 were recorded in a pre designed proforma.
2. A survey sent to Health Care Professionals working in the Paediatric inpatient facility was analysed
3. A telephone survey of experience of 17 randomly selected service users was analysed.
4. An educational package consisting of simulation, lectures, videos and a resource pack related to adolescent health was created, disseminated and feedback analysed.

Results

- 93 young persons aged 14–16y were admitted medically over 1 year with an average of 8 admissions per month.
- 27 were male and 66 were female.
- The average length of stay was 2.4 days