patients remotely over time. We undertook a service redesign project to optimise management of our complex high risk patients through a weekly virtual ward round. This was chaired by the Rheumatology CNS with attendance from Clinical Fellows and Consultants. Consequently, we were able to avoid loss to follow up and potential undesirable events including admissions to local hospitals, loss of schooling or parental work absence. Here we describe the process and value of the virtual ward round.

Objectives

- Active monitoring of high risk, high need complex patients
- Reduce admission rates
- Remotely manage/avoid unnecessary appointments
- Reduce unnecessary GP contacts

Methods Retrospective reviews of the weekly minutes with both qualitative and quantitative data collected. The CNS team generated a list of patients with clinical or social concerns, complex disease, frequent contact, upcoming transition, regular infusions and inpatients. Patients were divided into three categories; red, amber and green to highlight the concern level. Patients moved between groups as required and were taken off the list once concerns were dealt with.

Results An average of 58 patients were listed each week from a database of 791 and 16 decisions made on average. Discussions focussed on areas of concern therefore not all patients were discussed at each meeting. These decisions included new requests for day unit treatment/assessment, medication changes, changing appointments, referral to other specialties and whether patients can be removed from the list. There were no unexpected outpatients admitted. Patient conditions included Juvenile Idiopathic Arthritis, Systemic Lupus Erythematosus, Juvenile Dermatomyositis, Vasculitis, Scleroderma and Mixed Connective Tissue Disease with decisions leading to involvement from our colleagues in the dermatology and renal departments for many. A significant proportion of patients were added to the list due to social concerns or poor engagement.

Conclusions This project identified the high level of productivity possible by continuing a weekly virtual ward round during a very difficult year. It is a reliable and resilient method for the team to keep track of a complex patient cohort. Data collection also highlighted the valuable learning for individuals and the team as a whole by sharing knowledge, discussing treatment plans and problem solving difficult cases. Limitations to this project include limited prospective data collection for contemporaneous analysis and the use of very basic computer systems to record outcomes. Going forward we plan to develop this meeting with the potential to upscale and use similar formats for other patient groups. It would also be important to assess technology options available to assist more detailed documentation and analysis of the outcomes. Through this low cost implementation there has been highly valuable output with overall improvement of patient care quality and consistency.

British Association of General Paediatrics

1649

CRITICAL ILLNESS IN CHILDREN BEFORE AND DURING THE COVID-19 PANDEMIC: HOW HAS IT CHANGED?

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Background The COVID-19 pandemic has affected how patients access healthcare, including a rapid and significant rise in the use of virtual appointments. This change in medical access may result in delayed presentations, affecting patient outcomes including paediatric intensive care unit (PICU) admissions.

Objectives

- Evaluate any changes in the presentation of paediatric patients requiring transfer to PICU from a district general hospital during the COVID-19 pandemic.
- Detailed review of any cases where the pandemic may have delayed healthcare access.

Methods Information was retrospectively collected on all paediatric patients transferred to PICU over a 24 month period; 12 months prior to ('pre-COVID'), and 12 months following ('post-COVID'), the first national lockdown in March 2020.

Data recorded included age, diagnosis, length of stay and details around the presentation. Symptom duration and any healthcare interactions earlier in the illness were used to determine potential delays in presentation.

Three cases presenting during the pandemic were reviewed in greater detail to explore reasons behind their delayed presentations.

Results Seventeen children were included, 10 in the 'pre-COVID' period and 7 'post-COVID'. Mean patient age (3.2 vs 4.5 years) and length of stay on PICU (5.4 vs 3 days) were similar, although more children in the 'pre-COVID' group had underlying chronic conditions, such as neurological or respiratory conditions (70% vs 28.5% 'post-COVID').

Variation in diagnosis was seen, with 60% of PICU admissions in the 'pre-COVID' cohort having a respiratory focus (vs only 14% (n=1) in 'post-COVID' group) but a higher proportion of 'post-COVID' children were transferred with acute abdomens needing urgent surgical intervention (43% vs 0% 'pre-COVID', P value 0.05).

Reviewing pre-hospital events showed the 'post-COVID' group had a significantly longer mean duration of symptoms before presenting to secondary care (9.4 vs 3.3 days, P value 0.04) and none was reviewed face-to-face by a primary care physician in the days prior (0% vs 60% in 'pre-COVID' group, P value 0.03) despite 86% having one or more telephone consultations. Even combining all forms of primary care interaction, the overall number of episodes per pre-hospital sick day were much lower in the 'post-COVID' group (0.15 interactions per sick day vs 0.33 interactions/day in the 'pre-COVID' cohort).

The individual case reviews demonstrated how reduced face-to-face appointments impacted each patient journey.

Conclusions The COVID-19 pandemic, with the associated national lockdown periods and changes to healthcare accessibility, have significantly impacted our paediatric population despite the low rates of severe COVID-19 infection.

Some pandemic-related changes, including community restrictions and at-risk shielding, brought positive outcomes with reduced respiratory disease burden and lower rates of critical illness in vulnerable children. However the delays in both accessing appropriate community-based clinical reviews and presenting to secondary care when unwell are concerning, and the case reviews highlighted the potential pitfalls of reduced face-to-face interactions when assessing children.

The role of virtual assessments in children need to be carefully considered, especially in the context of another lockdown

or restrictive period, and the importance of high quality safety netting advice and patient education must not be underestimated.

British Society of Paediatric Endocrinology and Diabetes

1650 HIGH RATES OF DIABETIC KETOACIDOSIS IN CHILDREN WITH NEW ONSET TYPE 1 DIABETES DURING THE SARS-COV-2 PANDEMIC

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Background In the UK, around 25% of children and young people with type 1 diabetes mellitus (T1D) present in life-threatening diabetic ketoacidosis (DKA), a state of acute metabolic decompensation requiring hospitalisation. This carries significant morbidity and is associated with higher HbA1c (glycosylated haemoglobin), a maker of blood glucose exposure, both at diagnosis and in the long-term, which is a predictor of long-term complications.

The SARS-CoV-2 (Covid-19) pandemic has changed how people access healthcare. In order to determine the impact that the pandemic has had on children presenting with T1D, we compared the presentation of new cases before and during the pandemic.

Objectives To compare presentations of new-onset T1D to the Oxford Children's diabetes service during two time points: pre-Covid-19 (Cohort 1; February 2019 to July 2019) Vs. the first Covid-19 peak (Cohort 2; February 2020 to July 2020).

Methods Medical records of patients aged under 18 years with new-onset T1D were reviewed retrospectively. Data were collected using a standardised proforma, which included symptom duration, route of referral, presence of DKA, presenting HbA1c and C-peptide.

Results We identified 13 patients in cohort 1 and 17 in cohort 2; median age was 11.92 years (range 1.5 - 17.4 years) vs 9.1 years (range 3.76 to 14.9 years).

DKA rates were higher during the first phase of the pandemic; Cohort 1: 23% (n=3/13) vs Cohort 2: 71% (n=12/17); p=0.01. There was a trend towards a longer symptom duration during the pandemic, (Cohort 1: 2.3 weeks vs Cohort 2: 5.7 weeks) though this was not statistically significant (p=0.06). Presenting symptoms were comparable in the two cohorts with polydipsia being most frequently reported. There was no difference in mean HbA1c (HbA1c 109.6 mmol/mol vs 109.9 mmol/mol; p=0.98) or C-peptide levels (173.6 vs 189.8, p=0.98). The increased rates of DKA were seen in all severities (mild, moderate and severe).

Conclusions DKA rates are higher during the first wave of the pandemic and there was a trend towards a longer duration of symptoms preceding diagnosis. The reasons behind these findings are multifactorial involving changes to health-seeking behaviours, and reduced access to same day appointments in primary care. The increased DKA rate may be attributed to longer symptom duration prior to presentation, however a pro-inflammatory state associated with SARS-CoV-2 infection in paediatric populations is being increasingly recognised.

Down Syndrome Medical Interest Group

1651 THE IMPACT OF COVID-19 ON THYROID SURVEILLANCE OFFERED TO CHILDREN WITH DOWN SYNDROME

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Background The Down Syndrome Medical Interest Group U.K. & Ireland published Guidelines on thyroid disorders in children and young people with Down syndrome: surveillance and when to initiate treatment in April 2020. The guidelines emphasised the importance of timely surveillance to prevent a negative impact on the cognitive abilities and general health in children with Down syndrome.

Objectives In 2015 we undertook an audit of the thyroid surveillance offered to all children with Down syndrome. With the publication of the updated guidelines, we re-audited the same population cohort in 2020.

Methods A retrospective notes review was undertaken of all children with Down syndrome attending the child development centre. The results were compared to an audit undertaken in 2015. The notes were reviewed for documentation if a blood test offer was declined by the parents due to concerns of attending a health centre or non-compliance for other reasons.

Results Electronic case records of 69 children aged 0–19 were reviewed. There were six infants and 63 children aged 1–19 years. Seventy percent of children were offered a dried blood spot test and 30% a venous blood test. Six children had a known diagnosis of autoimmune hypothyroidism. Two children during the study period had a TSH above the local reference range but below 10 and a normal fT4. The parents declined a repeat blood test within 1–5 days as recommended in updated guidelines. They both have received a repeat serum blood test within four months and the results remain marginally abnormal. No child tested received a new diagnosis of thyroid disorder.

There was no documented evidence that parents were offered information on thyroid disorders and how to minimise the stress from blood tests.

As per the updated guidance 2/6 infants had their thyroid status checked at 4–6 months. One infant was 3 weeks old at the time of the study. In three infants there was no documentation of the offer, 2/3 infants have not been offered a face a face consultation in the community due to COVID-19.

In children above the age of one, 27% did not have their thyroid surveillance within 15 months compared to 3% in 2015. Four parents declined the test due to concerns around attending a health centre during the COVID-19 pandemic. Two young people declined the test due to needle phobia (similar to the cohort in 2015).

Anecdotally it was evident that most children had an upward BMI trend, a delayed offer for hearing and vision assessments.

Conclusions This audit highlights the impact of the COVID-19 pandemic on the thyroid surveillance offer to children and young people with Down syndrome. We must be proactive to support parents in making appropriate health choices by providing the relevant health information and reassurance about attending health centres during a pandemic, in keeping with the government guidance.