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

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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

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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.