- 2.. Rob Trubey, Chao Huang, Fiona V Lugg-Widger, Kerenza Hood, Davina Allen, Dawn Edwards, David Lacy, Amy Lloyd, Mala Mann, Brendan Mason, Alison Oliver, Damian Roland, Gerri Sefton, Richard Skone, Emma Thomas-Jones, Lyvonne N Tume, Colin Powell. Validity and effectiveness of paediatric early warning systems and track and trigger tools for identifying and reducing clinical deterioration in hospitalised children: a systematic review. PMCID: PMC6502038, DOI: 10.1136/bmjopen-2018-022105

British Society of Paediatric Endocrinology and Diabetes

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PROFILE OF THYROID DISORDERS IN CHILDREN WITH DOWN SYNDROME

Shiela Puri, Bethany McLelland, Nicola Bryce. *Leeds Community Healthcare NHS Trust*

10.1136/archdischild-2021-rcpch.807

Background The prevalence of thyroid disorders in children with Down syndrome is 6–10%. Guidelines on thyroid disorders in children and young people with Down syndrome: surveillance and when to initiate treatment in April 2020 were published by the Down Syndrome Medical Interest Group U.K & Ireland in 2020. The spectrum of thyroid disorders in children with Down syndrome includes congenital hypothyroidism and autoimmune thyroid disorders.

Objectives We undertook a retrospective study to review the profile of thyroid disorders of children with Down syndrome currently served by our child development centre serving a child population (0–19 years) of 64,500 children.

Methods A retrospective electronic case notes review was undertaken of 69 children with Down syndrome attending the child development centre, to identify children with a diagnosis of thyroid disorder and assess their biochemical and clinical presentation.

Results One infant (male) was diagnosed with congenital hypothyroidism. Six children were diagnosed with autoimmune hypothyroidism. Prevalence rate 8.8 percent. The median age at diagnosis was 6.6 years. The gender ratio was 3 female: 4 male. Two of these children had a borderline TSH for prolonged period before formally receiving a diagnosis of hypothyroidism, this ranged between 8 months and 45 months, the thyroid function was monitored every 6–12 months during this period. At the time of the initial raised TSH levels the TPO antibodies were normal and increasing to 997 and >1300. Two children have free T4 levels above the normal range (21) despite their TSH levels being above the local reference range and good compliance with medication. There was a rise in BMI at the time of diagnosis in six children (data not available for remaining children). Symptoms noted at diagnosis of thyroid disorder were weight gain, tiredness and sleep disturbance particularly in female patients. None of the children were recorded to have goitre. Two additional children were noted to have persistently raised TSH levels currently undergoing close monitoring, interestingly both these children have a slight rise in their TPO levels but less than 100 and a marginal increase in their BMI at the time of the initial rise in TSH levels, both sets of parents declined repeat serum thyroid testing within 1–5 days as recommended in the updated guidelines. There were no children diagnosed with hyperthyroidism or Graves' disease.

Conclusions Thyroid disorders in children who have Down syndrome appear to follow a more insidious course with

borderline or subclinical hypothyroidism being more commonly present than the general population. It is important to closely monitor the thyroid function to prevent additional disability. With the introduction of earlier thyroid surveillance at 4–6 months as per the updated DSMIG guidelines, it is important to undertake large-scale prospective population studies to evaluate the developmental outcomes in children with Down syndrome and subclinical hypothyroidism.

Quality Improvement and Patient Safety

1709

THE IMPACT OF COVID-19 ON PARENTAL EXPERIENCE IN A TERTIARY NEONATAL UNIT

¹Eva MacRae, ²Carolina Zorro, ²Ravindra Bhat, ²Ann Hickey, ²Anne Greenough. ¹King College Hospital Denmark Hill, London SE5 9RS; ²Kings College Hospital

10.1136/archdischild-2021-rcpch.808

Background All neonatal units, have implemented policies designed to prevent the spread of COVID-19 infection. Parents of babies admitted to neonatal units have had to make adjustments to comply with such guidance and visiting restrictions. Only one parent could visit their baby at a time and they were required to wear a surgical mask while on the neonatal unit. On site parent accommodation was not available.

Objectives

1. To assess parental experience on a tertiary neonatal unit during the COVID-19 pandemic.
2. To determine if the support received was deemed adequate.
3. To identify ways to improve family experiences.

Methods Parents of babies who had been admitted to the neonatal unit for at least one week, were asked to complete a questionnaire regarding their experience during the Covid-19 pandemic. Parents of babies receiving palliative care were excluded from the study. One questionnaire was completed by each household. The questionnaire took into account guidance from RCPCH, BAPM and the charity Bliss. Data were collected prospectively over approximately six weeks between 25/6/20 to 5/8/20. The data was analysed using Microsoft excel software. Differences were assessed for statistical significance using the chi square test.

Results A total of 38 questionnaires were completed. Thirty four (89.5%) parents felt either quite involved or fully involved in caring for their babies (e.g. feeding, bathing, skin care, taking the temperature and changing their nappy), while four parents (10.5%) felt a little involved ($p < 0.05$). There were 21 parents (62%) out of 34, who stated that there was no impact on the amount of time they spent giving kangaroo care and 13 parents (38%) felt it had decreased as a result of the pandemic.

Most parents (70%) did not experience any effect on the time spent breast feeding. Twenty four (63%) parents expressed concern with the quality of time they were able to spend with their babies. Thirty one parents (97%) were moderately to very satisfied with the updates from the neonatal team ($p < 0.05$). Fifty percent of parents had no problems visiting their babies in hospital, while 50% found it difficult.

Parents, generally felt they received excellent care. Concerns were expressed over the visiting restrictions and the impact of this on bonding with their babies. Some parents believed that