

with learning difficulties or physical disabilities in paediatric doctors working at a UK teaching hospital. As a pilot survey, questions will be assessed for their usefulness before potential further dissemination. It is hoped we can then use this information to address gaps in knowledge, ultimately improving the current quality of the care received by this group of patients.

**Methods** A pilot survey was created and distributed online to paediatricians working at a UK teaching hospital. Confidence and current knowledge were self-rated using 5-point Likert scales (1=No confidence/No knowledge). Results were analysed using descriptive statistics in Microsoft Excel.

**Results** Twenty-nine responses were received in total. Sixteen of the respondents (55.2%) were general paediatric doctors, the remainder consisted of doctors working in community child health (4/29), neurodisability (5/29) or paediatric specialities. Approximately two-thirds (65.5%, 19/29) of respondents were consultants. Almost three-quarters (21/29, 72.4%) of respondents rated their confidence in managing menstrual difficulties as low (3; only 3/29 (10%) felt very confident. Results were also similar for the question 'How confident do you feel in discussing and commencing initial management?' – this question was aimed more towards medical management (e.g. the oral contraceptive pill) and will be re-worded in the final survey to differentiate from general management. Thirteen respondents (38%) were confident (rated  $\geq 4$ ) in both signposting to services and knowing who to refer to for further help. Current training provision was limited with only 5/29 having received formal training in the past. Although training is lacking and confidence is low, 20/29 respondents recognised the significant impact (rated  $\geq 4$ ) it can have on quality of life for those affected.

**Conclusions** This pilot survey provides valuable initial insights into current confidence around the management of menstrual problems in those with learning difficulties or physical disabilities. Paediatricians locally recognise the burden that menstrual problems can place on patients and carers. However, exposure to previous formal training is rare and confidence in the initial management is low. Some questions which have been identified as being too similar will be reviewed prior to further dissemination. Moving forwards it is clear more educational opportunities will need to be created, and we will work with local experts to increase provision of this following completion of the finalised survey. After implementing quality improvement measures a repeat survey is planned. Additional qualitative work on patient/carer experiences is also being considered.

## Down Syndrome Medical Interest Group

1211

### THE USE OF CERVICAL AUSCULTATION TO DETECT SUBTLE AUDIBLE WET PHARYNGEAL SOUNDS (SAWPS-CA) AS A SCREENING TOOL FOR SILENT ASPIRATION IN INFANTS WITH TRISOMY 21

<sup>1</sup>Himali de Silva, <sup>1</sup>Narad Mathura, <sup>1</sup>Anne Wright, <sup>2</sup>Kyle Jasmin, <sup>3</sup>Alexandra Wright, <sup>1</sup>Evelina London Community Services; <sup>2</sup>Berkbeck College, UCL; <sup>3</sup>King's College London

10.1136/archdischild-2021-rcpch.478

**Background** Infants with Trisomy 21 (T21) are at a high risk of aspiration, mostly silent, making them susceptible to respiratory conditions. While disorders in the oral preparation and transport are easier to detect, disorders affecting pharyngeal function are not always overt, making identification of at-risk children difficult.

Since establishing the Down Syndrome Health Surveillance (DSHS) in 2015, all infants with T21 are referred for a feeding evaluation by SLT, during which the presence of subtle audible wet pharyngeal sounds on cervical auscultation (SAWPS-CA) is assessed. These subtle sounds can be indicative of oro-pharyngeal dysfunction and are hypothesised to be associated with aspiration leading to respiratory issues.

**Objectives** This study ascertained if SAWPS-CA indicated aspiration in infants with T21, as confirmed by VFSS, and explored whether the presence of medical comorbidities including prematurity, respiratory, congenital cardiac and gastrointestinal abnormalities was associated.

**Methods** The sample comprised all children with T21 aged 0–18 months referred to DSHS between 2015–2018 (N=33). Clinical records were reviewed specifically for the presence of SAWPS-CA, at initial and 4–8 month assessments; and aspiration confirmed via VFSS. Four categories of medical comorbidity hypothesised to be indicative of aspiration were reviewed (prematurity, respiratory, cardiac, gastrointestinal abnormalities).

**Results** SAWPS-CA was observed in 5 infants at initial assessment (15%), rising to 20 children at 4–8 months (61%). Sixteen of these 20 children were referred for VFSS which confirmed silent aspiration in all cases. The remaining 4 SAWPS-CA-positive children went on to develop chest infections, and were referred for VFSS at this stage. They all aspirated silently during the study. The 13 SAWPS-CA-negative children have remained asymptomatic with no respiratory complications during the study period.

The presence of any one or more of the categories of comorbidity (prematurity, respiratory, cardiac, gastrointestinal abnormalities) was significantly associated with the presence of SAWPS-CA (using logistical regression; Odds Ratio = 11.9,  $p=0.035$ ). No individual comorbidity significantly predicted a positive SAWPS-CA for silent aspiration, likely due to the small sample size and limited statistical power.

**Conclusions** Results suggest SAWPS-CA at 4–8 months is effective for identification of T21 children at risk of aspiration. Furthermore, the presence of any cardiac, GI, prematurity and respiratory comorbidities may be indicative of greater risk. We propose that infants with T21 be assessed and screened by an SLT by 8 months of age for possible aspiration using this technique. Priority should be given to those who have at least one additional comorbidity. VFSS provides best visualisation of a dynamic swallow, but is invasive, costly and requires a hospital setting. SAWPS-CA by a trained SLT can be used to identify those at greatest risk of oro-pharyngeal dysphagia requiring further evaluation using VFSS. Further work in a larger clinical sample would establish the sensitivity and specificity of SAWPS-CA in T21.