Aims Down Syndrome (DS) is associated with increased prevalence of coeliac disease (CD). Recent meta-analysis estimates prevalence at 5.8%.¹ The DS Medical Interest Group (DSMIG), does not recommend routine screening, despite guidance from the European Society of Paediatric Gastroenterology Hepatology and Nutrition (ESPGHAN).² HLA-DQ haplotyping for CD has been offered for the last 3 years.³

Method Children with DS identified from Support Needs System (SNS). In 2016, families were invited for HLA DQ haplotyping for DQ2.2 2.5& 8 (and coeliac serology). Subsequently, families invited though discussions in clinic. Children with positive typing are offered coeliac serology every 3 years (or sooner if symptomatic).

Results 35 (17 female/18 male) DS children were identified. (1 child excluded as already diagnosed). 28 (76%) children have been tested. 12 (39%) had negative haplotypes, excluding them from life-long screening. 16 (57%), tested positive (table 1). Mean age at testing was 7 years.

Abstract G270 Table 1 Haplotypes subtypes

	Male	Female
DQ2.5 (all heterozygous)	5	3
DQ8	1	1
DQ2.2	2	4

5 (31%) had positive coeliac serology. Of these, 3 (60%) had CD, one from each haplotype. 2 had positive serology at initial screening with positive biopsies and 1 diagnosed when rescreened. All were clinically asymptomatic. The other 2 were both DQ2.5: 1 had negative biopsy for CD but had gastritis and 1 refused biopsy. Both are being clinically monitored.

Conclusions Prevalence of CD in DS in this area is currently 11% using HLA-DQ haplotyping and 3 yearly screening. All were asymptomatic at diagnosis and all successfully started on to gluten-free diet. DQ typing is effective in excluding DS children from ongoing screening.¹⁻³ Positive haplotyping is effective in educating parents about potential CD and risk stratification.⁴⁻⁵ Three yearly coeliac serology will be performed alongside annual thyroid function tests.

DQ typing can be performed at the earliest opportunity in any child prior to gluten exposure and should be a standard of care in the UK. It reduces the burden of testing for the child and the financial cost of repeated serology when symptomatic as CD is very unlikely.

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INTENSIVE CARE ADMISSIONS IN CHILDREN WITH DOWN SYNDROME: TRENDS IN INCIDENCE AND OUTCOME

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Purpose In the first three years of life approximately 50% of children with Down Syndrome require hospitalisation. We aimed to investigate the epidemiology of admissions to Paediatric Intensive Care Units (PICU) in the UK for those with Down Syndrome, and to explore the impact of cardiac disease on admission.

Methods We obtained demographic and clinical data from PICA Net, the UK national audit database, on all children admitted to PICU who had a recorded diagnosis Down Syndrome. Patients were categorised as either cardiac or non-cardiac depending on their primary admission diagnosis. We used data from the Down National Down Syndrome Cytogenetic Register to calculate the proportion of children born with Down Syndrome who were admitted to PICU.

Results Our dataset included 2791 patients with 4561 admissions to PICU. Most patients had one admission to PICU, although there was an increasing trend for readmissions. Overall PICU mortality was 4.7% in this cohort. Over the study period mortality did not significantly change. A quarter of children born with Down Syndrome were admitted to a PICU by the age of 17 months (95% CI 13 – 24 months). Half of the admissions were due to cardiac disease.

Conclusions These data will inform future planning of PICU services and counselling of parents of new-borns with Down Syndrome. If current trends continue, there will be increasing numbers of repeat admissions of children with Down Syndrome presenting with both cardiac and non-cardiac disease.

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EFFICACY OF NUTRITIONAL REHABILITATION CENTRE INTERVENTIONS IN TREATMENT OF SEVERE ACUTE MALNUTRITION: A ONE YEAR LONGITUDINAL HOSPITAL BASED STUDY

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Aim Primary objective: Evaluate the effect of nutritional interventional measures of Nutritional rehabilitation centre(NRC) in promoting the nutritional status and growth of SAM children.

Secondary objectives:

- Follow-up of the study group after discharge to check for compliance of NRC interventions among beneficiaries.
- Factors responsible for compliance/noncompliance of interventions of NRC on follow up of admitted children.

Methods

Inclusion Criteria: Age: 6–60 months

Exclusion Criteria: Secondary malnutrition due to systemic illness or chronic infection

Management was based on 3 parameters

- Medical complications