

set up to teach a large population of the multi-disciplinary team on the safest technique to prone patients. From discussion with other centres training on the use of ventilator hyperinflation was delivered, a skill that was not previously used as a first line intervention.

33 patients were admitted between 26 March and 26 May 2020. All had respiratory physiotherapy treatments during their ICU journey, daily input was not always indicated. 5/33 had non-bronchoscopic bronchoalveolar lavages, 7/33 had chest x-ray changes, 6/33 had altered neurology.

4/33 patients had respiratory phenotype COVID-19; 1 had NBBAL, 2 had CXR changes and 1 had altered neurology.

Our PIMS-TS cohort had intensive rehabilitation requirements during their ICU admission and on discharge.

To conclude, respiratory physiotherapy was rarely indicated for paediatric COVID-19 patients. Rehabilitation requirements were significantly higher than expected. Many adult guidelines suggested minimal contact with these patients. Should we have followed this approach, our patients would not have been highlighted to have early and intensive rehabilitation requirements.

Digital poster presentations

13 INNOVATION FEED: THE DEVELOPMENT OF A WEB TOOL TO SUPPORT INNOVATION AT GOSH

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10.1136/archdischild-2020-gosh.13

Innovation is incredibly important in the growth and development of any organisation. In healthcare, the sharing of best practice and innovative ideas has the capacity to bring about significant patient benefit. However, it can be difficult to share ideas and develop collaborations in busy, multi-disciplinary organisations. The aim of this project was to build a website to allow staff from across the organisation to share concepts and ideas for innovative projects.

As part of a joint collaboration between GOSH, GOSH Children's Charity, and UCL computer science (CS), through the industry exchange network programme, a prototype website was developed using NodeJS with a MySQL database.

The platform allows ideas to be proposed, commented on, and voted for by users. Calls for innovative ideas can be launched to address specific issues within the organisation. The prototype website was developed to support the GOSH Charity and Trust to encourage staff to share their innovation ideas as well as the achievements and barriers associated with existing, or previous, innovation and improvement projects. The website also aims to connect staff from across the organisation who are working on similar projects, to facilitate sharing of experiences, ideas and expand cross-departmental collaborations.

14 CENANI-LENZ SYNDACTYLY IN SIBLINGS WITH A NOVEL HOMOZYGOUS LRP4 MUTATION AND RECURRENT HYPOGLYCAEMIA

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10.1136/archdischild-2020-gosh.14

Cenani-Lenz syndactyly (CLS) is a rare autosomal recessive syndrome characterized by disorganized oligosyndactyly of upper and lower limbs as well as radioulnar synostosis. Structural renal abnormalities are also common. We report two affected brothers, born to orthodox Jewish parents, in whom we found a novel homozygous missense variant c.4910G>A; p.(Cys1637Tyr) in LRP4 situated in an EGF-like domain between the fourth beta-propeller and transmembrane domains. Both brothers have had recurrent ketotic hypoglycaemia which has not been associated previously. We present 3D computed tomographic imaging illustrating the limb abnormalities in detail.

15 OVERNIGHT NASOGASTRIC TUBE (NGT) FEEDING IN CHILDREN ON NON-INVASIVE VENTILATION (NIV): PREVALENCE, FEEDING STRATEGIES AND ASPIRATION RISK

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10.1136/archdischild-2020-gosh.15

Overnight NGT feeding is regarded as high risk for aspiration in children on NIV, despite lack of evidence to support this. Local strategies mitigate aspiration risk by using bolus rather than continuous feeds overnight.

Aim To identify the prevalence of overnight NGT feeding in children on NIV, changes to feeding routes at 1 year follow up and aspiration related respiratory exacerbations.

Method A retrospective (Aug 2017-Aug 2019) review of all patients on NIV, focusing on those fed via NGT overnight.

Results 286 patients were managed by the NIV service at Great Ormond Street Hospital from August 2017 to August 2019.

Sixty-three patients were reliant on EN at NIV initiation, of whom 21 children were via NGT. 15/21 were fed overnight via NGT.

At 1 year follow up, 4/15 children continuing to feed overnight via NGT despite a long-term feeding route being recommended. 3/4 children this was not possible as they were unfit for surgery. 1/4 children parents declined.

Twelve of 15 children in this cohort had respiratory exacerbations in the 1 year follow up period.

One of 15 total respiratory exacerbations was linked to aspiration in a child who was bolus fed overnight via NGT and remained so at 1 year follow up.

Conclusion The majority of this cohort experienced respiratory exacerbations by 1 year follow up. However, only 1 event was linked to aspiration. Whilst age, diagnosis and clinical condition are potential contributory factors, overnight NGT feeding does not appear to increase aspiration risk in children on NIV.