

Abstract  
Poster Session C

Friday, November 15, 2019 8:00 am – 9:30 am

DEVELOPMENTAL AND PEDIATRIC: OTHER

C-52

**Neuropsychological Sequelae of Hypernatraemic Dehydration in Neonates – Working Towards the NHS England Five Year Forward View**

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**Objective:** Neonatal breastfeeding is reported to have advantages for both physical and psychological well-being, including decreased incidence of infections, improved neurodevelopmental outcomes and a variety of lifelong health benefits. In some cases inadequate breastfeeding can lead to malnutrition and hypernatraemic dehydration. While the impact on physical health from hypernatraemic dehydration is well reported, the longer neurocognitive and quality of life (QoL) outcomes are rarely documented. **Method:** We present neurocognitive profiles of two paediatric cases of hypernatraemic dehydration where significant brain damage had occurred. Neuropsychological assessments (Wechsler Intelligence Scale for Children, Children's Memory Scale, Rey-Osterrieth Complex Figure Test, Delis-Kaplan Executive Function System and Wechsler Non-Verbal Scale of Ability, Strengths & Difficulties Questionnaire) were administered within detailed clinical interview. **Results:** Both children displayed cognitive performance within broad average level but with specific problems identified in working memory and processing speed, as well as immaturity and marked dysexecutive problems reported at home and school. These profiles are consistent with scan findings of injuries to the brain, including the frontal lobe. **Conclusions:** We discuss the potential role for Pediatric Neuropsychologists in line with the NHS 5-year plan, in educating professionals involved in the care of pregnant women and their young babies regarding the impact of breastfeeding malnutrition and hypernatraemic dehydration on cognitive development and QoL. Education modules would aim to highlight implications of the potential devastating neuropsychological effects where malnutrition and hypernatraemic dehydration is severe, with the aim of increasing awareness of consequences and reducing the incidence of breastfeeding malnutrition and hypernatraemic dehydration and its potential lifelong neuropsychological effects.