Covid 19 although is primarily respiratory virus, its effects on other organ systems are getting attention as we are learning new symptomatology. With the increasing evidence, it is evident that SARS Cov-19 related encephalopathy is not that uncommon, especially if patients is suffering from other comorbidities and is older than 50 years of age. Garg et al in his paper mention about cytokine storm secondary to intense inflammatory response generated by Covid 19 Virus may contribute to encephalopathy.

Our case highlights the similar finding in paediatric age group which is interesting. Unfortunately, we could not perform lumbar puncture but to complete the evaluation it is advisable to evaluate serum and CSF paired cytokines to consider possibility of Immune effector cell neurotoxicity syndrome.

Results Our case is first reported case of Covid 19 encephalopathy in Rett syndrome.

Conclusions Our case sets an alert to consider encephalopathy as a presenting features in Covid 19 patients with underlying neurological condition.

Quality Improvement and Patient Safety

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NEONATAL THERMOREGULATION DURING LONG LINE INSERTION

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Background Preterm infants often require line insertion and are known to be at high risk of temperature instability during these procedures. Both hypothermia and hyperthermia adversely affect patient condition and can impact long term morbidity and mortality.

Having recognised temperature at line insertion as a clinical concern anecdotally and through the mortality review process a quality improvement project was designed to review process and identify areas for change.

In 2018, an audit highlighted poor neonatal thermoregulation during line insertions and a new guideline 'Thermoregulation for central line insertion' was created. This guideline was to bring to awareness the harmful effects of temperature changes in preterm infants and also the management options to correct the temperature and avoid hypothermia or hyperthermia.

Objectives To evaluate the thermoregulation interventions made when the neonate's temperature is found to be out of range. The current practice at this hospital is the use of a Drager temperature display monitor which is situated behind the incubator.

The new temperature probe, which has been introduced in this project, displays the temperature on the overhead monitor alongside monitoring such as heart rate and oxygen saturations. When set, the overhead monitor can alarm when the patient's temperature is measured to be out of range, not only alerting the staff undertaking the procedure but other members in the room as well.

Methods Most recently, over six weeks we evaluated the documentation of long line insertion procedures to compare with the current standard of 100% which is a completed long line proforma. We also compared the continuous documentation of temperature and interventions when using the Drager temperature display with the overhead monitor temperature display.

Results The overall documentation of the long line proforma was inadequate and particularly poor documentation of temperature during the procedure. It was found that 26% of the long line proforma were completed against the expected standard of a complete proforma which is 100%.

When assessing the current practice, temperature and intervention were often not recorded or recorded inadequately. Using the new probe, long line documentation of temperature had improved, and more interventions documented. 87% of long line forms had the continuous temperature recording documented for the new probes used in comparison to the 43% using the current Drager temperature display.

Conclusions The new probe has been shown to be effective in increasing awareness of temperature changes during long line insertions as documentation of temperature and intervention had improved. The persistent alarm brings more attention and urgency to the harmful temperatures, thereby leading to the staff taking action.

We recommend the new probe be stocked, included with line insertion equipment, the central line checklist modified and an assistant is available to assist with documentation.

We also recommend that there should be a re-audit of the new temperature probes and documentation of temperature in 6–12 months. The re-audit should not be limited to long lines only, but any line insertion, also procedures such as intubations. The new temperature probe would be useful for any procedure that increases the risk of temperature instability in the neonate.

Association of Paediatric Emergency Medicine

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WINTER 2020–21 IN THE PAEDS ED – A PUBLIC HEALTH REVOLUTION?

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Background The Paediatric Emergency Department is typically under immense pressure during winter months but the winter of 2020–2021 has seemed very different. We sought to quantify this and to reflect on how local departments, regional healthcare systems and national guidance could adapt as a result.

Objectives

1. To determine whether or not there was any significant difference in the overall number of patients attending our Paediatric Emergency Department in winter months during the COVID–19 pandemic compared to preceding years.