moments like nursing handovers and ward rounds were noted to be the loudest periods, with a range of 65 to 70 dB.

The questionnaires reflect that although staff members have some knowledge on noise levels and their impact on the newborn, education on the effect of noise in ambience around preterm can be helpful.

On the subject of the permissible loudness, 53.3% of staff answered 55 dB, most of the participants were unsure. Regarding the level of noise at which babies start experiencing pain, 60% answered more than 90 dB, and 13.3% answered more than 200 dB. Handovers and conversations in the unit were noted to have a physiological and psychological effect on the neonates as evidenced by previous studies and suggestions were made to reduce the noise by altering alarm volumes, adding visual aids, and educating staff and parents.

Conclusions We conclude that the loudness of noise has adverse effects on the quality of care of newborns. Guidelines to regulate the noise intensity should be followed to ensure the best of care to growing preterms. Moving forward, our intended actions would be: to educate staff and parents on the best of care to growing preterms. Moving forward, our intended actions would be: to educate staff and parents on the kind of systemic anticoagulation prior to endovascular intervention, mostly due to rapid, progressive neurological deterioration with anticoagulation started afterwards. The most common indications for endovascular treatment were declining GCS (46%) and worsening/non-improving symptoms despite anticoagulation (35%). Local catheter-guided pharmacological thrombolysis with urokinase or recombinant tissue plasminogen activator was the most commonly used intervention (83%). A combination of endovascular interventions was used in 35% of patients. Complete symptom resolution and complete recanalisation was achieved in 63% and 44% of patients, respectively. 9% of patients died despite endovascular treatment.

Conclusions The literature reports the use of endovascular interventions for children with progressively worsening symptoms or declining neurological status despite anticoagulation and children in whom anticoagulation is contraindicated. However, there is no consensus on how patients are deemed to be unresponsive to anticoagulation and suitable for endovascular treatment. Cohort studies and randomised controlled trials are needed to robustly assess the efficacy and safety of these interventions in children.

Paediatric Special Interest Group: British Society of Haematology

ENDOVASCULAR TREATMENT OF CEREBRAL VENOUS SINUS THROMBOSIS IN CHILDREN: A SCOPING REVIEW

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Background Cerebral venous sinus thrombosis (CVST) is a cerebrovascular disease that typically affects children and young children. Its clinical presentation is highly variable and non-specific, making diagnosis extremely difficult. Systemic anticoagulation is the first-line treatment, with the aim of minimising thrombus extension and achieving recanalisation. However, many patients deteriorate despite maximal anticoagulation. The clinical heterogeneity, low incidence and paucity of clinical trials on CVST have created significant uncertainty and variability in how patients not responding to anticoagulation are managed. Endovascular treatment is an option in these patients. However, there is particularly limited evidence for its use in children. We present the first scoping review of endovascular interventions for CVST in children.

Objectives To collate, describe and assess the literature on endovascular interventions available for CVST in children, with the aim of guiding future research and the development of clinical guidelines.

Methods A systematic scoping review on both primary and secondary research on endovascular interventions for CVST specifically in children (aged 1 month - 16 years) was conducted according to PRISMA-ScR guidelines. Studies were identified using the databases PubMed, Embase, Cochrane Library and OpenGrey. 226 studies were identified using our search strategy on 16th October 2020. Following application of eligibility criteria, 48 studies were included for analysis.

Results Case reports (n=15) and case series (n=15) comprised the majority of the studies. 12 narrative reviews and 1 systematic review were identified. Only 1 non-randomised interventional study and 4 observational studies were identified. No randomised controlled studies were identified. 54 unique, individual children with CVST with details of their diagnosis and endovascular intervention reported were identified across 32 studies. 83% of patients had at least one risk factor for CVST, with inflammatory bowel disease (15%) and dehydration (15%) being the most common. 74% of cases had a bland (i.e. non-haemorrhagic) infarct identified on diagnostic imaging, whilst 26% had a haemorrhagic infarct. The majority (65%) of patients received systemic anticoagulation with heparin before endovascular intervention. 11% did not receive any kind of systemic anticoagulation prior to endovascular intervention, mostly due to rapid, progressive neurological deterioration with anticoagulation started afterwards. The most common indications for endovascular treatment were declining GCS (46%) and worsening/non-improving symptoms despite anticoagulation (35%). Local catheter-guided pharmacological thrombolysis with urokinase or recombinant tissue plasminogen activator was the most commonly used intervention (83%). A combination of endovascular interventions was used in 35% of patients. Complete symptom resolution and complete recanalisation was achieved in 63% and 44% of patients, respectively. 9% of patients died despite endovascular treatment.

Conclusions The literature reports the use of endovascular interventions for children with progressively worsening symptoms or declining neurological status despite anticoagulation and children in whom anticoagulation is contraindicated. However, there is no consensus on how patients are deemed to be unresponsive to anticoagulation and suitable for endovascular treatment. Cohort studies and randomised controlled trials are needed to robustly assess the efficacy and safety of these interventions in children.

International Child Health Group

ADMISSIONS TO A LOW-RESOURCE NEONATAL UNIT IN MALAWI USING A MOBILE APP AND DASHBOARD: A ONE YEAR DIGITAL PERINATAL OUTCOME AUDIT

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Background Neonatal deaths still account for a large proportion of child deaths. Understanding the extent and characteristics of neonatal deaths in Sub-Saharan Africa is a significant challenge with poor quality, inaccurate record-keeping in these settings. The process of audit is considered the foundation of quality improvement. With mHealth gaining prominence in many hospital departments, the NeoTree data collection and