English Summary

Title

Assessment of pediatric delirium in hospitalized critically ill children aged 0-18 years.

Background

Pediatric delirium is a complex neuropsychiatric syndrome with an acute cerebral dysfunction. Pediatric delirium is manifested by neuropsychiatric symptoms which do not differ much from the symptoms seen in adults.

As in adults, pediatric delirium is categorized into three sub-groups: hyperactive, hypoactive and mixed type of delirium. The hyperactive pediatric delirium may occur with the child showing vigorous response. It may be critical for the child, because of the increased risk of it falling out of bed, accidental removal of various catheters and accidential extubation. The high degree of discomfort and stress is also considered to be a risk to the child's recovery. At the hypoactive pediatric delirium, parents often do not recognize their child's behavior as the child may be quiet and apathetic.

There is a positive correlation between the severity of the disease and delirium. Many risk factors are identified and can be classified as patient-related or treatment-related. Patient-related factors include the child's age under two years of age, disease severity and mentally disabled children. The treatment-related factors include mechanical ventilation, coma, as well as administration of benzodiazepines.

The reported prevalence of pediatric delirium is 4-56%. Delirium is described in children under one year, but not yet in preterm infants. Children with delirium have longer hospital stay, longer lasting respiratory therapy and increased mortality.

Evidence suggests that pediatric delirium is underdiagnosed. This may be caused by the lack of focus on this condition. It can be hard to see and detect symptoms in preverbal children, particularly at the hypoactive form, symptoms may be easily overlooked. Many of the symptoms of pediatric delirium overlap with other conditions such as pain, distress and withdrawal symptoms.

Objectives

To develop recommendations on which instrument should be preferred for systematic identification and assessment of delirium in hospitalized critically ill children aged 0-18 years

Participants

Critically ill children aged 0-18 years

Index test

Validation of tools for evaluation of pediatric delirium

Types of studies

There were identified two relevant articles in the international guideline 'Clinical Recommendations for pain, sedation, withdrawal and delirium Assessment in critically Ill Infants and Children: an ESPNIC Position Statement for Healthcare Professionals' and one primary study. A critical appraisal was conducted.

Types of Outcomes

Sensitivity and specificity to identify delirium

Search strategy

Through a search in PubMed, a clinical guideline was identified: Clinical reccomendations for pain, sedation, withdrawal and delirium assessment in critically ill infants and children: an ESPNIC position statement for healthcare professionals. Clinical guidelines in the field were further searched in the databases: Tripdatabase, JBI Best practice sheets, NICE, SIGN and RNAO, where no other clinical guidelines were found.

Methodological quality

The guideline was assessed using AGREE II. The included study was initially assessed independently by all members of the working group, and then a joint assessment was agreed among workgroup participants. In case of discrepancy, these were discussed, after reading the article again. The article was read; quality evaluated and summarized using the checklist for diagnostic testing. Formulation of recommendations was done in consensus among workgroup participants.

Recommendation for clinical practice

↑↑ For identification and assessment of pediatric delirium in hospitalized critically ill children aged 0-18 years, CAPD should be used ⊕⊕ ◯◯ LOW