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Analgesia in paediatric acute pancreatitis: A scoping systematic review

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Abstract

Objective

Acute pancreatitis (AP) is a common paediatric condition, yet there is little data to support optimal analgesic practice. The aim of this scoping review was to report analgesic practice, investigate trends in analgesic strategy and evaluate the impact of analgesic modality on outcomes.

Methods

A systematic search of Medline, Embase, CENTRAL, Pubmed Central and Google Scholar was performed by two independent investigators. This review adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews checklist.

Results

Three retrospective cohort studies, all conducted in North America, reported on analgesic practice in paediatric AP. The studies included 658 patients (median age, 12 years; female sex, 57%; non-biliary aetiology, 85.9%). Overall, analgesia was administered in 67% of patients, including opioids in 59.5% (43.8%–71.4%). Rates of acetaminophen (17.9% and 77.7%) and non-steroidal anti-inflammatory drugs (7.7% and 40.2%) were reported in two studies. Two studies reported reducing rates of opioid administration or reduced duration of opioid administration since 2017 and 2014, respectively. One study did not find any correlation between opioid administration and sociodemographic

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were no long-term data on analgesic use post-discharge.

Conclusions

Opioids are the mainstay of pain treatment in paediatric AP in North America. However, factors that influence the analgesic type, the impact of analgesic modality on the post-pancreatitis outcome and long-term analgesic use constitute a knowledge gap. Future studies are needed to inform analgesic use in paediatric AP.

Highlights

What is Known

Acute pancreatitis (AP) is the most common paediatric pancreatic disease.

AP incidence is increasing by 3% annually in the Western world.

Analgesia remains one of the cornerstones of early management in AP.

What is New

Opioids form the mainstay of pain relief in paediatric AP in North America.

There is a trend towards reducing opioid use during hospital admission in paediatric AP.

No studies report analgesic practice in paediatric AP out with North America and further research is required.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

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