

ABSTRACT SUBMISSION FORM

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Exploring the role of sex and gender on health research



CHR D 2020: Abstract Submission Form

Submitter Name

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Title

Methods to improve cast removal experience in the pediatric setting: A systematic scoping review

Background

Injury and anxiety during plaster cast removal has been discussed in the literature for nearly 100 years, yet guidelines for preventing pain and anxiety during pediatric cast removal do not exist. Research has examined methods to improve pediatric cast removal experience but has not been synthesized to date.

Objective

To provide a comprehensive review of strategies designed to improve patient and family experience during pediatric cast removal.

Methods

A systematic scoping review was conducted. A peer-reviewed search strategy was adapted for use with Medline, Embase, PsycINFO, CINAHL and Scopus databases and grey literature sources. Inclusion criteria: articles published between January 1975-October 2019 with a primary focus on pediatric patients undergoing cast removal / cast room procedures. Two team members conducted screening, full text review, and data extraction. A third team member resolved conflicts. Data were charted with guidance from the Template for Intervention Description and Replication Checklist. Quality appraisal was conducted with Joanna Briggs Institute Checklist for Randomized Controlled Trials.

Results

974 unique articles were retrieved and screened. Nine articles (eight unique studies) were included. 763 participants were included across studies (median=85, range=20-28). Two studies investigated the impact of a physical intervention (noise reduction). Five evaluated psychologically-based interventions (distraction techniques, music therapy, play therapy, preparatory information). One study combined approaches. Heart rate was used as a primary (87%) or secondary (12%) outcome measure of anxiety across studies. Each study reported some positive effect of the intervention studied, however effects varied by age, outcome measure, and timing of measurement. Studies consistently scored low on outcome measure validity and

blinding.

Conclusion

Both physical and psychological interventions were found to reduce anxiety, however results varied with age, outcome measure, and timing of measurement. Future research should evaluate interventions that are tailored to age and family preference.

Theme:

Clinical

Do you have a table/figure to upload?

No

Are you willing to participate in Goodbear's Den?

Yes

Presenter Status:

Non-Trainee

What was your role in the project?

Clinical Stakeholders, perform experiments/analyze data/write abstract

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