TITLE: Assessment of Thermal Tolerance: Clinical Evidence and Guidelines

DATE: 08 December 2010

RESEARCH QUESTIONS

1. What is the clinical evidence regarding methods or tools for the assessment of thermal tolerance for patients who are unable to communicate or have impaired movement?

2. What are the evidence-based guidelines regarding methods or tools for the assessment of thermal tolerance for patients who are unable to communicate or have impaired movement?

KEY MESSAGE

Limited information was identified regarding methods or tools for the assessment of thermal tolerance for patients who are unable to communicate or have impaired movement.

METHODS

A limited literature search was conducted on key health technology assessment resources, including PubMed, the Cochrane Library (Issue 11, 2010), University of York Centre for Reviews and Dissemination (CRD) databases, EuroScan, international health technology agencies, and a focused Internet search. The search was limited to English language articles published between January 1, 2005 and November 26, 2010. Filters were applied to limit the retrieval to health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies and guidelines. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.

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RESULTS

Rapid response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials, non-randomized studies, and evidence-based guidelines.

Two relevant non-randomized studies were identified regarding methods or tools for the assessment of thermal tolerance for patients who are unable to communicate or have impaired movement. No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, or evidence-based guidelines were identified.

OVERALL SUMMARY OF FINDINGS

No guidelines regarding methods or tools for the assessment of thermal tolerance were identified in the literature. Two non-randomized studies were identified.

Individuals with intellectual disabilities and communication impairment were included in a study to evaluate observer bias of the Facial Action Coding System. In the sham-controlled study, blinded observers rated the facial behaviour of participants before, during, and after five sensory tests, including cool and warm, and were able to distinguish between the active and sham trials. This type of tool could be beneficial to help identify sensory issues or tolerance in a non-verbal population. In a second study, verbal and non-verbal reactions to a noxious cold pressor test were observed in healthy patients using the Critical-Care Pain Observation Tool. The results scored by the observers were significantly correlated with the self-reported pain scores of the participants. The authors concluded that these results support the tool’s clinical use for pain measurement in patients who are unable to self-report.
REFERENCES SUMMARIZED

Health technology assessments
No literature identified.

Systematic reviews and meta-analyses
No literature identified.

Randomized controlled trials
No literature identified.

Non-randomized studies


Guidelines and recommendations
No literature identified

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