TITLE:  Topical Nitroglycerin Paste for Dilating Peripheral Veins: Clinical Effectiveness and Guidelines

DATE:  25 February 2010

RESEARCH QUESTIONS:

1. What are the benefits and harms of using nitroglycerin paste to dilate peripheral veins to facilitate easier venous access?

2. What are the guidelines regarding the use of nitroglycerin paste to dilate peripheral veins to facilitate easier venous access?

METHODS:

A limited literature search was conducted on key health technology assessment resources, including PubMed, the Cochrane Library (Issue 2, 2010), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI, EuroScan, international health technology agencies, and a focused Internet search. The search was limited to human, English language articles published between 1985 and February 2010. Filters were applied to limit the retrieval to health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, controlled clinical trials, observational studies, guidelines, and safety data. Internet links were provided, where available.

RESULTS:

HTIS 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, controlled clinical trials, observational studies, and evidence-based guidelines.

Eight randomized controlled trials regarding the benefits and harms of using nitroglycerin paste to dilate peripheral veins to facilitate easier venous access were identified from the literature search results. No relevant health technology assessments, systematic reviews, meta-analyses,
controlled clinical trials, or observational studies were identified. No evidence-based guidelines regarding the use of nitroglycerin paste to dilate peripheral veins to facilitate easier venous access were identified. Additional articles of potential interest can be found in the appendix.

Health technology assessments
No literature identified

Systematic reviews and meta-analyses
No literature identified

Randomized controlled trials


Controlled clinical trials
No literature identified

Observational studies
No literature identified

Guidelines and recommendations
No literature identified
APPENDIX – FURTHER INFORMATION:

Clinical practice guidelines

   
   Note: see Peripheral Vein Cannulation, page 20

Additional references