Pentoxifylline for intermittent claudication: a critical review

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Authors' objectives
To review the clinical effectiveness of pentoxifylline in the treatment of intermittent claudication.

Searching
MEDLINE was searched and references of retrieved papers were examined.

Study selection
Study designs of evaluations included in the review
Double-blind randomised controlled trials (RCTs) were included.

Specific interventions included in the review
Oral pentoxifylline.

Participants included in the review
Patients with intermittent claudication.

Outcomes assessed in the review
Absence of pain and/or maximum walking distance were assessed.

How were decisions on the relevance of primary studies made?
The author does not state how the papers were selected for the review, or how many of the reviewers performed the selection.

Assessment of study quality
RCTs that were placebo-controlled and double-blind, because strong placebo effects have been reported when treating claudications. The author does not state how the papers were assessed for validity, or how many of the reviewers performed the validity assessment.

Data extraction
The author does not state how the data were extracted for the review, or how many of the reviewers performed the data extraction.

Methods of synthesis
How were the studies combined?
The studies were combined by a narrative review.

How were differences between studies investigated?
Differences between the studies were investigated by inclusion or exclusion criteria, length or dosage of treatment, plus other confounding variables.

Results of the review
Seventeen RCTs were included.

Pentoxifylline has been shown to prolong the walking distance of patients with intermittent claudication in a statistically-
significant manner. Whether this improvement in walking capacity is clinically relevant is unclear.

**Authors' conclusions**
Pentoxifylline prolongs the walking distance in patients with intermittent claudication. Since only a few published studies meet high-quality criteria, more rigorous trials would be welcome. It is unclear whether the improvement in walking capacity is clinically relevant.

**CRD commentary**
The methods used in this review are not stated clearly. No dates or search terms are given for the MEDLINE search. The table of studies could be more informative, e.g. the outcome measures used in each study could be given, along with the odds ratios for treatment versus placebo. In addition, it appears that exercise is the treatment of choice, and it is unclear whether oral pentoxifylline confers additional benefits to patients who can and do participate in therapeutic exercise regimens.

**Bibliographic details**

**PubMedID**
8172380

**Indexing Status**
Subject indexing assigned by NLM

**MeSH**
Blood Viscosity /drug effects; Clinical Trials as Topic; Humans; Intermittent Claudication /blood /drug therapy; Pentoxifylline /pharmacology /therapeutic use

**AccessionNumber**
11994000251

**Date bibliographic record published**
30/11/1996

**Date abstract record published**
30/11/1996

**Record Status**
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.