Syndesmosis sprains of the ankle: a systematic review
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CRD summary
This review evaluated treatments for syndesmosis ankle sprains. The authors concluded that the six included case series suggest areas for additional investigation rather than strong evidence to support a particular treatment method. There were limitations to this review but the identification of only a small number of observational studies supports the authors’ conclusion regarding the need for more research.

Authors’ objectives
To evaluate the effects of treatment for syndesmosis ankle sprains.

Searching
PubMed and EMBASE were searched from inception to July 2006 for relevant studies; the search terms were reported.

Study selection
Study designs of evaluations included in the review
Prospective studies were eligible for inclusion in the review.

Specific interventions included in the review
Studies evaluating any treatment of syndesmosis injuries were eligible for inclusion. The specific interventions reported in the included studies were avoidance of activity, immobilisation, ice, anti-inflammatory medications, exercise and surgery.

Participants included in the review
Studies including participants with syndesmosis injuries without fractures or radiographic widening on plain radiographs were eligible for inclusion. All studies included athletically active participants and had a minimum follow-up of 6 months.

Outcomes assessed in the review
The authors did not state any inclusion criteria relating to the outcomes. The specific outcomes reported in the included studies were time lost to sport, recurrent injuries, and measures of symptoms and function.

How were decisions on the relevance of primary studies made?
Two reviewers independently selected studies for inclusion in the review.

Assessment of study quality
The authors did not state that they assessed validity.

Data extraction
The authors did not state how the data were extracted for the review, or how many reviewers performed the data extraction. Data on patient outcomes were extracted.

Methods of synthesis
How were the studies combined?
The studies were combined in a narrative.
How were differences between studies investigated?
Major differences in study characteristics were presented in tables and briefly mentioned in the narrative synthesis.

Results of the review
Six studies (n=164) were included in the review.

All studies were case series.

No consistent treatment regimen was employed among the studies. Only two patients underwent surgery.

Three studies reported functional outcomes: one stated that 44% of the patients had acceptable outcomes, and two rated average participant outcomes as good to excellent.

The average time lost from activity varied from a low of around 10 to 14 days to a high of 52 days (range: 0 to 137 days).

Three studies reported recurrent injuries: 0% and 6% over at least 6 or 7 months in two studies, and 43% over 46 months in the third study.

Authors’ conclusions
This review generated prospective areas for additional investigation rather than providing strong evidence to support a particular method of treatment.

CRD commentary
This review addressed a very broad research question, as reflected by the inclusion criteria. Two databases were searched for relevant studies, though it is unclear whether this search was restricted to English language publications; if this was the case then relevant articles might have been missed. Two reviewers independently selected studies for inclusion in order to minimise the potential for error and bias in this process, but the methods used to extract the data were not reported. Very little detail of the included studies was available in the review tables or synthesis. In particular, despite the types of treatment being listed in the text, there was no indication of which treatments were given in which studies. There were limitations to this review but the identification of only a small number of observational studies does tend to support the authors’ conclusion regarding the need for more research.

Implications of the review for practice and research
Practice: The authors did not state any implications for practice.

Research: The authors stated that future studies should use information on severity of ligament damage at the time of injury to choose the proper treatment to maximise each patient’s return to activity. Studies should use standardised tools for diagnosing and grading injuries, such as the dorsiflexion-external rotation test, the tenderness length measurement and evaluation by magnetic resonance imaging.

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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.