Table 1 Continued				
Author, date and country	Patient group	Study type (level of evidence)	Outcomes	Key results
		Diagnosis proposed before and after auscultation by a physician (with initial access to referring letter and patient history) and compared with the (separate) diagnosis made on discharge letter.	Predictive value of normal lung auscultation for absence of lung or heart disease	OR 0.12 [95% CI 0.053–0.29]
				2. Auscultatory findings were not described.
				3. Influence of patient's history to the diagnosis proposed would contribute to findings despite attempts to control this. The study was not specific for pneumonia and so a cardiac history (eg chest pain with orthopnea) with crackles will give a very different impression to sputum with crackles.

PPV, positive predictive value; NPV, negative predictive value; LR+, positive likelihood ratio; LR-, negative likelihood ratio

Tennis elbow and epicondyle clasp

Report by Michael Callaghan, *Research Physiotherapist*

Search checked by Jenny Holloway, *Physiotherapist Manchester Royal Infirmary, Manchester*
doi: 10.1136/emj.2007.047852

A short cut review was carried out to establish whether there is any evidence that an epicondyle clasp can speed and improve recovery from tennis elbow. 149 papers were found using the reported search, of which two answered the clinical question. The authors, patient groups, outcomes results and key weaknesses of this evidence are presented. The clinical bottom line is that there is some weak evidence that any improvement seems to occur soon after the clasp is applied, but this is not maintained after 6 months and 1 year follow up.

Three part question

In [adults with chronic tennis elbow] does [an epicondyle clasp in combination with physiotherapy] improve [pain and function]?

Clinical scenario

A 28-year-old female presents with a 4 month history of 'tennis elbow' (lateral epicondylitis). She receives physiotherapy in the form of manual and electrotherapy and you wonder if there is any benefit from additional use of an epicondyle clasp.

Search strategy

MEDLINE 1966–02/07, CINAHL 1982–02/07, AMED 1985–02/07, SPORTDiscus 1830–02/07, EMBASE 1996–02/07, via the OVID interface. In addition the Cochrane database and PEDro database were also searched

Medline, CINAHL, AMED, EMBASE, SPORTSDiscus: [(exp Tennis Elbow/ OR (lateral elbow pain OR lateral epicondylitis OR epicondylitis). mp) AND (support OR strapping OR epicondyle clasp OR elbow support OR epicondylitis clasp). mp) LIMIT to human AND English language.

Search outcome

149 papers were retrieved and after reading the abstracts, a total of four papers were considered relevant to the question. One was a Cochrane review that was last updated in October 2001. The other three papers were published since that time, one of which did not use a clasp as an additional treatment to physiotherapy. This was discounted as it did not answer the clinical question. The final paper was an economic evaluation of the Struijs study.

Comment(s)

The Cochrane review was unable to provide definite conclusions as to the efficacy of an epicondyle clasp in conjunction with physiotherapy (see table). The most recent randomised controlled trial, by the same authors, found short term benefits for a combination of brace and physiotherapy over brace only in three out of eight outcome measures of "severity of complaints", a "pain free function questionnaire" and "convenience of daily activities". The same combination was also superior to physiotherapy only in one out of eight outcomes for "pressure pain threshold". These significant differences are not seen at 6 months or 1 year follow-up.

There are confounding results concerning the use of an epicondyle clasp in addition to other physiotherapy for chronic tennis elbow.

Table 2

Author, date and country	Patient group	Study type (level of evidence)	Outcomes	Key results	Study weaknesses
Struijs <i>et al</i> , 2002, Holland	5 RCTs N=109 3 of these used epicondyle clasp/bandage as addition to physiotherapy treatment	Cochrane review	Pain Elbow function/grip strength/painfree grip/global improvement/. lateral epicondyle pressure pain	Not statistically significant on short term pain relief All studies low power. Impossible to make definite conclusions	Low power
Struijs <i>et al</i> , 2004, Holland	N=180 Clinical diagnosis of 6 weeks lateral epicondylitis 3 Groups; i. physiotherapy ii. clasp only iii. clasp and physio combined	RCT	8 outcomes scoring pain all based on 100 point numerical scale at 6 weeks At 6 months At 1 year	N=176 Contradictory results at 6 weeks; combination therapy better than brace-only in 3 outcomes (pain main complaint, inconvenience and severity of complaint) but worse in 1 (abilities of daily living). Combination better than physio alone in 1 outcome (increase in pressure pain threshold). These were significant at $p<0.05$, but showed wide confidence intervals. not statistically significant not statistically significant	Condition only 6 weeks old. No control group No statistical adjustment for multiple analyses. Exercise regime not supervised (?compliance)

RCT, randomised controlled trial

► CLINICAL BOTTOM LINE

There is some weak evidence that any improvement seems to occur soon after the clasp is applied, but this is not maintained after 6 months and 1 year follow up

Struijs PAPA, Arola H, Assendelft WJJ, *et al*. Orthotic devices for the treatment of tennis elbow. *The Cochrane Database of Systematic Reviews* 2002, Issue 1. Art. No.: CD001821. DOI: 10.1002/14651858.CD001821.

Struijs PA, Kerkhoffs GM, Assendelft WJ, *et al*. Conservative treatment of lateral epicondylitis: brace versus physical therapy or a combination of both-a randomized clinical trial. *American Journal of Sports Medicine* 2004 Mar;**32**(2):462-9.

Chlorpromazine in migraine

Report by Peter Loga, Staff Specialist in Emergency Medicine

Search checked by David Lewis, Consultant in Emergency Medicine

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A short cut review was carried out to establish whether there is any evidence that chlorpromazine is an effective treatment for migraine. 81 papers were found using the reported search, of which eight answered the clinical question. The authors, patient groups, outcomes results and key weaknesses of this evidence are presented. The clinical bottom line is that a regime of prophylactic intravenous normal saline and intramuscular or intravenous chlorpromazine appears to have superior efficacy to pethidine, lignocaine or ergot derivatives, and similar efficacy to ketorolac, metoclopramide or sumatriptan for the abolition of the pain of migraine headache.

Three part question

In [patients with migraine headache] is [chlorpromazine as effective as standard treatments] at [resolving pain]?

Clinical scenario

A 38-year-old female with a history of regular migraine headache since her teenage years presents to your Emergency Department with a classic history of migraine symptoms. She has tried simple over the counter analgesia, as well as her prescription medication, a triptan, with no effect. You have heard of chlorpromazine being used in the abolition of migraine attacks, but are unsure of its relative efficacy compared to other standard treatments.

Search strategy

Medline OVID interface. 1966–30th Jan 2007

Cochrane Database of Systematic Reviews. 4th Quarter 2006

Cochrane Central Register of Controlled Trials. 1st Quarter 2007-01-31

CINAHL. 1982- December Week 2 2006

ACP Journal Club. 1991-January/February 2007

EMBASE. 1966-30th Jan 2007-01-31

[phenothiazines OR chlorpromazine] AND [migraine OR vascular headache]

LIMIT to English Language and Human

Search outcome

A total 81 papers were found in Medline, of which eight are directly relevant to the question. No further papers were obtained by searching Cochrane, CINAHL, EMBASE or ACPJC.

Comment(s)

Fear of significant side effects from chlorpromazine appear to be unfounded. There was no incidence of symptomatic postural hypotension in studies which patients received prophylactic intravenous normal saline prior to chlorpromazine administration, and no dystonic reactions were reported in any study. Drowsiness is, however, frequently reported. Chlorpromazine also seems to be efficacious whether given via the intramuscular or intravenous route.