

FOR SHORT ANSWERS

See p 439

FOR LONG ANSWERS

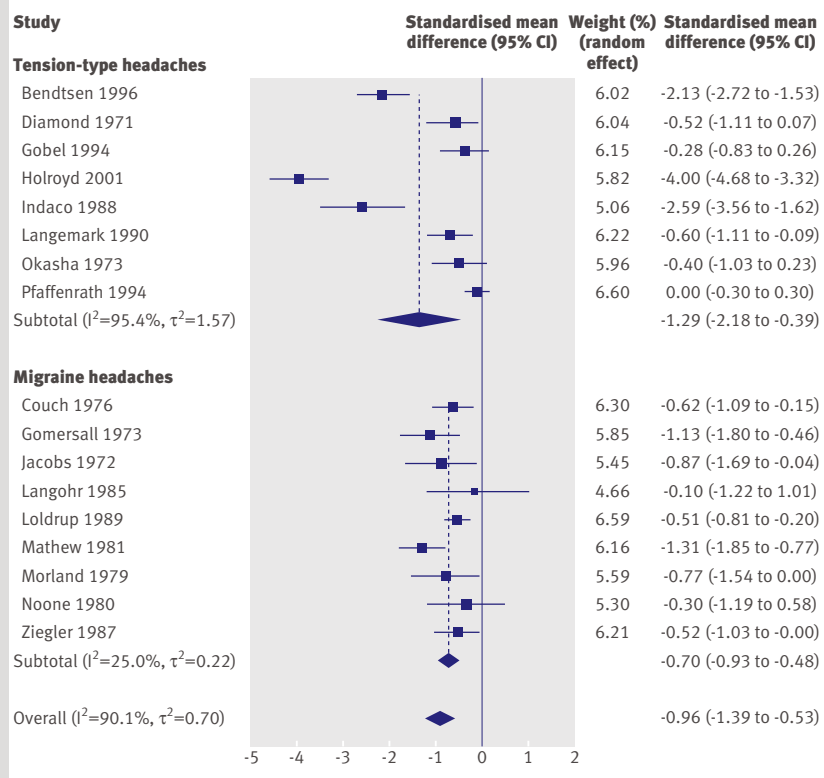
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STATISTICAL QUESTION Meta-analyses VI



Forest plot of the effectiveness of tricyclic antidepressants (amitriptyline, clomipramine, amitriptylinoxide, opipramol, or doxepin) compared with placebo in reducing the burden of headache

Researchers undertook a meta-analysis of the efficacy of tricyclic antidepressants in the treatment of migraine and tension-type headaches. Randomised placebo controlled trials were included if the active treatment group received a tricyclic antidepressant regularly at any dose as a single intervention for at least four weeks.

The primary outcome was burden of headache, typically measured by recording the frequency and intensity of headaches; larger values were indicative of greater burden. For each trial, the standardised mean difference in headache burden was derived because trials did not use the same method of measurement. The standardised mean difference was calculated as the burden in the active treatment group minus that in the placebo group. For each subgroup—tension-type headaches and migraine headaches—a subtotal estimate was derived, then an overall effect estimate was obtained for both subgroups combined.

The results of the meta-analysis were presented in a forest plot.

Which of the following statements, if any, are true?

- For both subgroups combined, the overall estimate of headache burden with tricyclic antidepressants was significantly different from that with placebo at the 5% level of significance
- For both subgroups combined, statistical heterogeneity existed between the sample estimates of the population mean difference in the burden of headache
- For the migraine headaches subgroup, statistical heterogeneity existed between the sample estimates of the population mean difference in the burden of headache

Submitted by Philip Sedgwick
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CASE REPORT A boy with a painful arm

A healthy 8 year old boy, with no history of surgery or medical conditions, presented to the accident and emergency department with severe pain in his right arm after falling off a four foot wall. He had a painful, tender, and swollen right elbow, which he was hesitant to move. The radial pulse was not palpable on examination. Radiography confirmed that he had a right supracondylar fracture of the humerus (Gartland type III, completely displaced). He was treated urgently by open reduction and internal fixation with K wires. After surgery, the radial pulse was still not palpable, although his fingers showed good capillary refill and pain was initially absent on extension. During the postoperative period, the arm became increasingly painful. The pain was “out of proportion” to the nature of the injury and required increasing doses of analgesia. The arm was also notably warm and swollen; palpation showed a tense forearm with extremely reduced capillary refill.

- What is the most likely diagnosis?
- What is the pathological process?
- How should such patients be monitored?
- What is the appropriate management for this patient?
- What are the possible complications if the condition is left untreated?

Submitted by D A Pettitt and P McArthur
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ON EXAMINATION QUIZ

Developmental dysplasia of the hip

This week's question is on developmental dysplasia of the hip and is taken from the onExamination revision questions for the MRCS part 1 exam.

Which of the following statements, if any, are true regarding developmental (congenital) dislocation of the hip?

- Instability of the hip occurs in less than 1 in 20 000 live births
- It is a recognised complication of breech presentation
- One of the possible causes is subclinical neuromuscular abnormality
- It is characterised by an anterior “lump” sign
- If it is identified at birth, conservative treatment is usually effective