### FOR SHORT ANSWERS

See p 378

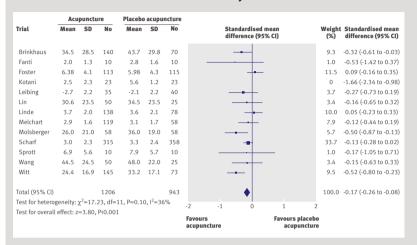
#### **FOR LONG ANSWERS**

Go to the Education channel on bmj.com

# **ENDGAMES**

We welcome contributions that would help doctors with postgraduate examinations See bmj.com/endgames for details

# STATISTICAL QUESTION Meta-analyses V



Forest plot of the effectiveness of acupuncture compared with placebo acupuncture in reducing pain at end of treatment. For each trial and the total overall effect, the mean difference in pain was derived as acupuncture minus placebo acupuncture

Submitted by Philip Sedgwick

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Researchers undertook a meta-analysis of the analgesic effect of acupuncture. Randomised controlled trials of acupuncture for pain were included only if they had three arms incorporating two control groups, with patients randomised to acupuncture, placebo acupuncture, or no acupuncture. Thirteen trials were identified. Placebo acupuncture included insertion of needles into non-acupuncture points or the use of non-penetrating needles. Separate analyses were undertaken for acupuncture versus placebo acupuncture and placebo acupuncture versus no acupuncture.

The trials used different instruments to record the primary outcome of self reported pain at the end of treatment, including visual analogue scales and ranking scales. Therefore, standardised mean differences were calculated. The results of the meta-analysis for acupuncture compared with placebo acupuncture were presented in a forest plot (figure).

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

- a) The standardised mean difference depends on the original measurement scale
- Standardised mean differences convert all outcomes to a common scale, measured in multiples of standard deviations
- c) The sample estimates and associated 95% confidence intervals were plotted on a logarithmic scale
- d) The overall estimated mean pain at the end of treatment with acupuncture was significantly different from that for placebo acupuncture at the 5% level of significance

## CASE REPORT

# Neck lump in a young woman

A 27 year old woman presented to her general practitioner with an increase in the size of a longstanding lump in her neck. She had first noticed it four years ago, as a small right sided lump, but in recent months it had increased in size to cause obvious asymmetry. Over the past few years she had also experienced flushing when drinking alcohol and loose stools. Her only medical history was tonsillectomy and adenoidectomy as a child. She had no family history of endocrinopathy or sudden death. On examination, she had a single well defined lump in the right anterior triangle, extending down to her clavicle. She was clinically euthyroid and thyroid function tests were unremarkable.

- Name five criteria that should prompt urgent outpatient referral for a neck lump.
- 2 What is the differential diagnosis in a young woman with these symptoms?
- 3 What is the diagnostic investigation of choice?
- 4 What other investigations might add to the clinical picture?
- 5 What rare diagnosis is suggested by this clinical picture?

Submitted by D Burrage, F U Hassan, S Clarke

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## ON EXAMINATION QUIZ

## Glasgow coma scale

This week's question is on the Glasgow coma scale and is taken from the onExamination revision questions for the FRCS general surgery exam.

#### Patient 1

A 40 year old man is involved in a head on collision while driving to work. In the resuscitation room he opens his eyes to pain, is mumbling inappropriately, and tries to stop the senior house officer putting a cannula in his arm.

## Patient 2

A 50 year old woman jumps from the seventh floor of an office block in an attempt to commit suicide. In the resuscitation room there is no eye opening or speech. She does not respond when her nail bed is pressed.

#### Patient 3

A 60 year old man has been celebrating his daughter's wedding. He gets into a fight with his son in law and is knocked unconscious. When he arrives at the emergency department he opens his eyes when asked to but is unsure of where he is and why. When asked to take his tie off he does so.

Calculate the Glasgow coma scale for each of the above presentations.

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