FOR SHORT ANSWERS
See p 296
FOR LONG ANSWERS
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ENDGAMES

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STATISTICAL QUESTION

Relative risks and confidence intervals

Researchers investigated if a standardised programme of combined manual therapy and exercise improved shoulder pain and function in people with chronic rotator cuff disease. A randomised, placebo controlled trial of 22 weeks duration was used. The placebo comprised inactive ultrasound therapy and application of an inert gel. A total of 120 participants were recruited.

One of the primary outcomes was participants' global rating of overall change. At 11 weeks, the relative risk of a self reported successful outcome (defined as "much better") for the standardised programme compared with placebo was 1.43 (95% confidence interval 0.87 to 2.34).

Which of the following, if any, are true for the self reported change at 11 weeks?

a) The sample relative risk is an estimate of the population parameter
b) The probability that the confidence interval contains the population relative risk is 0.95
c) 95% of the sample on the standardised programme have a 0.87 to 2.34 probability of a successful outcome
d) In the population, the standardised programme could reduce the risk of a successful outcome relative to placebo

Submitted by Philip Sedgwick and Louise Marston
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ON EXAMINATION QUIZ

ICD-10 classification

This week's question is on classification using the *International Statistical Classification of Diseases and Related Health Problems*, 10th revision (ICD-10), and is taken from the OnExamination revision questions for the MRCPsych papers 1 and 2.

Is the following statement true or false?

The ICD-10 retains the term "endogenous depression" in the classification of affective disorders

ANATOMY QUIZ

T2 weighted axial magnetic resonance image of the brain

Identify the structures labelled A, B, C, D, and E in this T2 weighted axial magnetic resonance image of the brain.

Submitted by A Nair
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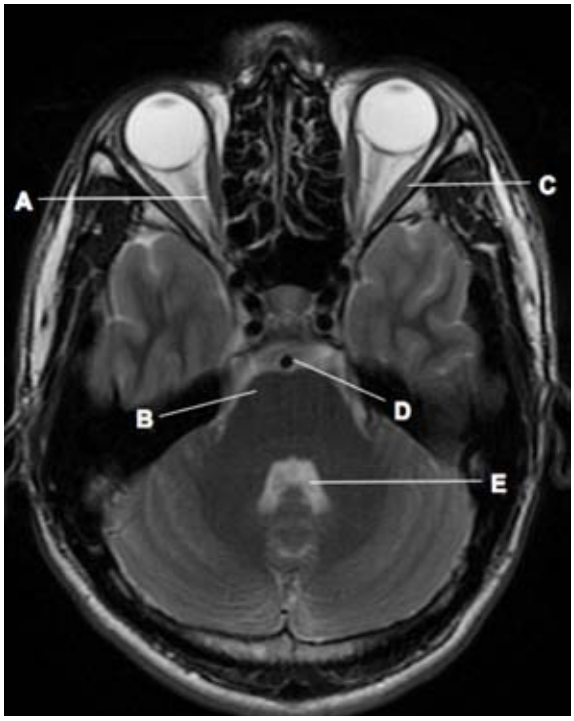

CASE REPORT

Recurrent vomiting and lethargy in an infant—just another viral illness?

An 18 month old girl was admitted to hospital to be investigated for failure to thrive and developmental delay. She presented with a three day history of vomiting, poor fluid intake, and lethargy. She had no fever or associated diarrhoea. She had always been described as a "sickly" child and had often been admitted to hospital, where she was treated for "viral illness." Her symptoms began at 1 month of age. She had frequent vomiting episodes with no obvious triggers. The episodes usually occurred shortly after feeds. Diarrhoea was sometimes present but she had no associated fever. She grew lethargic during and after these attacks and occasionally was irritable.

The patient was unable to tolerate solid foods on weaning at age 4 months. Birth had been normal with no perinatal complications, and her immunisations were kept up to date. She reached her developmental milestones up to the age of 10-12 months and then failed to gain new developmental skills. Her weight dropped from the 50th centile at 12 months to below the 0.4th centile at 18 months. Similarly, her height dropped from the 50th centile to below the 9th centile at the same time. Baseline investigations were performed, and full blood count, urea, electrolytes, liver function, thyroid function, bone profile, immunoglobulins, urine dipstick, and stool culture were normal. Ammonia was 191 µmol/l and blood gas values on air were pH 7.4661, partial pressure of carbon dioxide 2.761, and partial pressure of oxygen 22.191.

1 What are the differential diagnoses in an infant with recurrent non-specific clinical features, unexplained developmental delay, and failure to thrive?
2 What is the biochemical abnormality responsible for this clinical picture?
3 What are the possible causes of this biochemical picture?
4 How would you manage this condition?

Submitted by J Cheung, M Sharrard, and H Clements
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