

FOR SHORT ANSWERS

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FOR LONG ANSWERS

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Fig 1 | Plain radiograph of the abdomen

PICTURE QUIZ

A woman with a distended abdomen

A 78 year old woman presented with sudden onset colicky abdominal pain and vomiting. She had not opened her bowels or passed flatus for 24 hours but reported no change in her bowel habit. She described a history of intermittent right lower quadrant pain that resolved with flatus. She had no other medical history of note.

On examination she had a distended abdomen with generalised abdominal tenderness and guarding in the right iliac fossa. Auscultation showed tinkling bowel sounds. She underwent plain radiography of the abdomen.

- 1 What are the radiological findings?
- 2 What is the likely diagnosis?
- 3 What further tests could you perform to confirm the diagnosis?
- 4 How would you manage this condition?

Submitted by A Shaw, B Smith, and D Howlett

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STATISTICAL QUESTION z scores

A cluster randomised controlled trial assessed the long term effects of an obesity prevention programme in schools. A total of 511 children aged between 7 and 11 years from six schools were recruited and randomly allocated to the intervention or control. The intervention comprised focused education promoting a healthy diet plus discouragement of consumption of carbonated drinks, and was delivered over one school year. The control group received no intervention. Both groups were followed up three years after randomisation.

The primary outcome was change in body mass index (BMI) at follow-up. BMI was transformed to z scores using previously published growth reference curves that adjusted for age and sex. At three year follow-up, the BMI z scores had increased in the control group by 0.10

(SD 0.53) but decreased in the intervention group by -0.01 (SD 0.58), with a mean difference of 0.10 (95% confidence interval -0.00 to 0.21; P=0.06).

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

- a) Body mass index during infancy is independent of age and sex
- b) z scores allowed the direct comparison of BMI in boys and girls of different ages
- c) z scores are always positive in value
- d) z scores are normally distributed

Submitted by Philip Sedgwick

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ON EXAMINATION QUIZ

Renal colic in general practice

This week's question is on renal colic in general practice and is taken from the onExamination revision questions for the MRCGP exam.

An otherwise healthy 30 year old woman had her second attack of renal colic in two years and passed a stone. On examination, her blood urea concentration was normal.

Which one of the following investigations would be the most important to conduct?

- A Cystoscopy
- B Renal biopsy
- C Serum calcium concentration
- D Urinary albumin:creatinine ratio
- E X ray of the hands