

## FOR SHORT ANSWERS

See p 102

## FOR LONG ANSWERS

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# ENDGAMES

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## ANATOMY QUIZ

### Axial computed tomography image through the base of the skull (bone windows)

Identify the structures labelled A and B in this axial computed tomography image through the base of the skull.

Submitted by James Halls

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## STATISTICAL QUESTION

### T scores and z scores

A 79 year old white woman had her bone mineral density (BMD) measured to assess for osteoporosis and fracture risk. The table shows the results of dual energy x ray absorptiometry (DXA).

Results of dual energy x ray absorptiometry on the right hip of a 79 year old patient

Region	Bone mineral density (g/cm <sup>2</sup> )	T score	z score
<b>Right hip</b>			
Femoral neck	0.607	-2.2	0.1
Trochanteric	0.661	-0.4	1.3
Intertrochanteric	1.001	-0.6	1.2
Total	0.841	-0.8	1.2
<b>Lumbar spine</b>			
L1	0.782	-1.3	1.0
L2	1.083	0.5	3.1
L3	1.179	0.9	3.6
L4	1.218	0.9	3.8
Total	1.070	0.2	2.9

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

- The z scores enable BMD measurements to be compared between men and women of different ages and ethnic groups
- The z scores are normally distributed
- This woman's BMD measurements were below the mean for her age and ethnicity
- The T scores compare the woman's BMD measurements with those of white women at an age when bone density is at its peak

Submitted by Philip Sedgwick

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## CASE REPORT

### Repeated falls and broken bones

A 72 year old woman attended the emergency department because of a painful right hip after a fall the day before. Unable to get up from the floor, she had lain there until she was found by her son. She had broken her left wrist three years ago after a fall outside her house, and this had been managed conservatively. She was taking antihypertensives but no other drugs and rarely drank alcohol. She lived alone and was independent for activities of daily living. While independently mobile within and outside the house, she could not walk long distances. She had pain in the right groin and was unable to move her leg. On examination, she had no localised bruising, and her right leg was shortened and externally rotated. She could not raise the leg. She had no pain anywhere else, and physical examination was otherwise unremarkable. A radiograph showed an intertrochanteric fracture of the right neck of the femur, which was treated with surgery.

- What underlying condition(s) should you consider in this patient?
- What further investigations should be done?
- How should the risk of further fractures be assessed?
- How should the underlying condition be managed?

Submitted by M Hossain and Paresh Jobanputra

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## ON EXAMINATION QUIZ

### *Chlamydia* screening

This week's question is on *Chlamydia* screening and is taken from the onExamination revision questions for the MRCGP.

A 26 year old woman wants to be screened for *Chlamydia* because she is worried about infertility. She has been in a stable relationship for the past five years.

Which one of the following statements is true with regard to *Chlamydia* screening?

- As increasing numbers of *Chlamydia* infections have been reported so have the rates of pelvic inflammatory disease
- Samples should always be taken by speculum
- The complication rate from untreated *Chlamydia* infection is 30%
- There is a wide evidence base that *Chlamydia* screening prevents pelvic inflammatory disease
- Evidence to support *Chlamydia* screening is limited