

## FOR SHORT ANSWERS

See p 1412

## FOR LONG ANSWERS

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Fig 1 | Plain anteroposterior radiograph of the pelvis



Fig 2 | T2 weighted coronal magnetic resonance imaging scan of the pelvis

## PICTURE QUIZ

### A limping child

A 4 year old boy attended the emergency department with a two week history of “limping.” On further questioning he also had vague left sided pain in the knee and thigh. He was otherwise well, with no constitutional symptoms and no history of injury. On examination he was afebrile. He was reluctant to put weight on the affected leg, hurrying quickly off it when walking. Knee movements were unremarkable, but he had marked restriction of internal rotation and abduction of the left hip. Blood results showed a haemoglobin of 130 g/L (reference range 100-148), white blood cell count of  $9 \times 10^9$  cells/L (6.3-16.2), C reactive protein of 5 mg/L (0-8), and erythrocyte sedimentation rate of 12 mm/h (2-8). Given the duration of symptoms radiography was performed. The findings were thought to be inconclusive (fig 1), so pelvic magnetic resonance imaging (MRI) was performed (fig 2).

- 1 What is the name for this gait pattern?
- 2 What are the differential diagnoses of limping in a 4 year old?
- 3 What is the diagnosis, and what radiological features support this?
- 4 What is the role of baseline haematological investigation in the work-up of this child?
- 5 How should this condition be managed?

Submitted by Daniel C Perry, Aenone R Harper, Colin E Bruce  
Cite this as: *BMJ* 2011;342:d3565

## STATISTICAL QUESTION

### Screening tests: indices of performance

The SCOFF questionnaire was assessed as a screening tool for eating disorders in primary care. The questionnaire consists of five questions that deal with core features of anorexia nervosa and bulimia nervosa. Consecutive women attendees aged 18-50 years at two general practices were invited to participate and 341 agreed. All women completed the SCOFF questionnaire and also underwent a clinical diagnostic interview for eating disorders based on criteria from the *Diagnostic and Statistical Manual of Mental Disorders* (fourth edition).

Women who responded yes to two or more of the five questions on the SCOFF questionnaire were identified as “positive” and at “high risk” of eating disorders; otherwise they were identified as “negative” and at “low risk” of eating disorders. The table shows the results of the SCOFF questionnaire in relation to the clinical diagnostic interview.

#### Cross-tabulation of the results of the SCOFF questionnaire against the clinical diagnosis of eating disorders

Result of SCOFF questionnaire*	Diagnosed with eating disorder		Total
	Yes	No	
“Positive”	11 (true positives)	34 (false positives)	45
“Negative”	2 (false negatives)	294 (true negatives)	296
	13	328	

\*Women were identified as “positive” by the SCOFF questionnaire if they responded yes to two or more of the five questions, otherwise they were identified as “negative.”

Which one of the following is the calculation for the positive predictive value of the SCOFF questionnaire as a screening tool for eating disorders in primary care?

- a)  $(11/(11+2)) \times 100\% = 84.6\%$
- b)  $(11/(11+34)) \times 100\% = 24.4\%$
- c)  $(294/(34+294)) \times 100\% = 89.6\%$
- d)  $(294/(34+2)) \times 100\% = 99.3\%$

Submitted by Philip Sedgwick  
Cite this as: *BMJ* 2011;342:d3763

## ON EXAMINATION QUIZ

### Palpitations

This week’s question is on palpitations and is taken from the onExamination revision questions for the MRCGP exam.

A 58 year old woman is referred to you from the practice nurse after electrocardiography shows she is in atrial fibrillation.

When you take her history she complains of palpitations and that she has also noticed some weight loss over the past two months. On examination, she has an irregularly irregular pulse and displays a fine tremor.

Which one of the following is the most appropriate investigation to perform?

- A Echocardiography
- B Exercise tolerance test
- C Full blood count
- D Thyroid function test
- E Twenty four hour electrocardiography