

ENDGAMES

We welcome contributions that would help doctors with postgraduate examinations

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FOR SHORT ANSWERS

See p 1244

FOR LONG ANSWERS

Use advanced search at bmj.com and enter question details

CASE REPORT

An elderly woman with weight loss and diarrhoea

An 80 year old woman presented to her general practitioner in July 2006 with a 2 month history of diarrhoea. She complained that she passed loose stools approximately four times a day and had to get up at night to open her bowels. Her appetite had been poor and, as a consequence, she thought that she had lost approximately 6 kg in weight. The patient had noticed that the diarrhoea began shortly after one of her regular medications, dosulepin hydrochloride, had been stopped. Her medical history was hypertension, angina, and a benign breast lump. She was a non-smoker and did not drink any alcohol. Her regular medications were as follows: aspirin 75 mg once daily, atenolol 50 mg twice daily, bendroflumethiazide 2.5 mg once daily, doxazosin 6 mg once daily, and simvastatin 40 mg once daily.

The patient was referred to a gastroenterologist and an outpatient computed tomography colonography was arranged. The results of this investigation were normal.

Routine blood tests were requested at the initial consultation in July 2006 and the results were as follows (normal ranges shown in brackets):

- Haemoglobin 131 g/l (130-180)
- Platelet count $150 \times 10^9/l$ (150-450)
- White blood cell count $5.4 \times 10^9/l$ (4-11)
- Sodium concentration 139 mmol/l (135-145)
- Potassium concentration 3.8 mmol/l (3.4-5.0)
- Urea concentration 6.9 mmol/l (3.1-7.9)
- Creatinine concentration 105 000 $\mu\text{mol/l}$ (70 000-110 000)
- Bilirubin concentration 13 $\mu\text{mol/l}$ (0-19)
- Alkaline phosphatase concentration 60 U/l (35-120)
- Alanine aminotransferase concentration 24 U/l (0-45)
- Thyroid stimulating hormone concentration <0.05 mIU/l (0.3-4.7)
- Free thyroxine concentration 19 pmol/l (11-23)
- Free triiodothyronine concentration 6.6 pmol/l (3.5-6.5)
- Thyroid peroxidase antibody concentration 39 kU/l (0-60)

Her thyroid function was subsequently monitored

Thyroid function test results from July 2006 to October 2007

	Normal range	July 2006	Sept 2006	Nov 2006	Oct 2007
Thyroid stimulating hormone (mIU/l)	0.3-4.7	<0.05	<0.05	<0.05	<0.05
Free thyroxine (pmol/l)	11-23	19	18	19	23
Free triiodothyronine (pmol/l)	3.5-6.5	6.6	6.7	6.5	6.9

Abnormal results are shown in bold; units are shown in brackets

- 1 What was the biochemical abnormality in July 2006?
- 2 What do the subsequent thyroid function tests show?
- 3 What are the potential causes of these biochemical abnormalities?
- 4 What are the risks associated with this biochemical pattern?
- 5 What treatment, if any, would you offer this patient?

Submitted by Anna L Mitchell and Simon Pearce Cite this as: *BMJ* 2009;338:b1721



An itchy rash

PICTURE QUIZ

A characteristic rash

A 53 year old man presented with an itchy, red rash on his lower leg after a trip to Brazil. He recalled having been bitten on the right ankle while on a beach and had covered the bite with a plaster. The initial bite mark on the ankle extended by 1-2 cm per day in a serpiginous pattern across the ankle and up the leg. Other than intense irritation of the skin, he had no other symptoms and was systemically well.

- 1 What is the diagnosis?
- 2 What are the differential diagnoses?
- 3 How is it treated?

Submitted by E E Craythorne, S Wong, R Morris Jones, and A W P du Vivier Cite this as: *BMJ* 2009;338:b1451

STATISTICAL QUESTION

Standardised mortality ratios

The standardised mortality ratio for a certain town, using England and Wales as the standard, is reported as 70. Which of the following statements, if any, are true?

- a) The low standardised mortality ratio could be because the average age of the town's population is low
- b) The death rate in each age band is 70% of that seen in England and Wales
- c) The number of deaths in the town is 70% of what would be expected if the age specific death rates for England and Wales are applied to the town population
- d) The standardised mortality ratio for the town is 30% lower than the average for England and Wales

Submitted by John Fletcher Cite this as: *BMJ* 2009;338:b2005

ON EXAMINATION QUIZ

Emergency medicine: paediatrics

The answer to this question and more questions on this topic are available from www.onexamination.com/endgames until midnight on Wednesday. This week's quiz is on paediatric emergency medicine and is taken from the OnExamination revision questions for the Fellow of the Royal College of Anaesthetists primary examination.

Infants with cold injury might present with which of the following signs?

- A Abdominal distension
- B Hypoglycaemia
- C Metabolic alkalosis
- D Polyuria
- E Pulmonary haemorrhage