

FOR SHORT ANSWERS

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FOR LONG ANSWERS

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ENDGAMES

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CASE REPORT

Fever in the vaccinated returning traveller

A 64 year old woman presented to hospital with fevers, chills, lethargy, and poor appetite. The symptoms had begun six days previously, after she had returned to the United Kingdom from a three week holiday visiting friends and family in Gujarat, India. She also felt nauseous, had a moderately severe bilateral frontal headache, and was constipated. Her only medical history was a thyroidectomy in 1982. Before travelling she received all relevant vaccinations, including those against hepatitis A and B and typhoid fever. She had not taken malarial prophylaxis. Her only regular medication was thyroxine 150 µg once a day.

On examination she seemed well. Her temperature was 37.3°C, pulse 80 beats/min regular, blood pressure 101/67 mm Hg, and respiratory rate 15 breaths/min. Her abdomen was soft but tender in the right upper quadrant, with no demonstrable organomegaly; bowel sounds were normal.

Routine investigations showed a haemoglobin of 113 g/l, mean corpuscular volume 85 fl (78-100), white cell count $3.4 \times 10^9/l$ (4.5-11.0), neutrophils $2.1 \times 10^9/l$ (1.80-7.70), lymphocytes $0.99 \times 10^9/l$ (1.10-4.80), platelets $194 \times 10^9/l$ (140-450), C reactive protein 126 mg/l (<5), erythrocyte sedimentation rate 40 mm/h, sodium 136 mmol/l (135-145), potassium 3.6 mmol/l (3.5-5.1), creatinine 61 µmol/l (53-97), urea 3.1 mmol/l (2.5-6.7), alanine aminotransferase 68 U/l (0-55), alkaline phosphatase 242 U/l (40-150), total bilirubin 11 µmol/l (3-21), albumin 35 g/l (35-50), and corrected calcium 2.45 mmol/l (2.15-2.58).

Malaria parasites were not seen on three thick and thin blood films over three days. Chest radiography showed no abnormalities.

- 1 What is the most likely diagnosis?
- 2 What tests would confirm it?
- 3 How would you treat the patient?
- 4 What would you advise the patient?
- 5 Who else would you contact?

Submitted by James Powell

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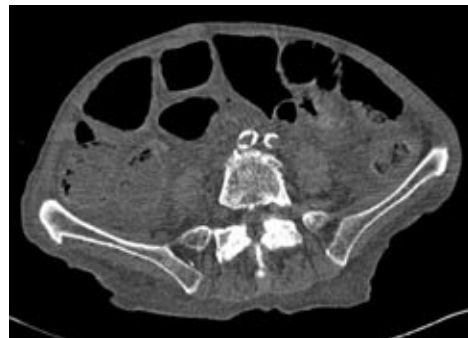
PICTURE QUIZ

Unusual computed tomography findings in a patient presenting with acute abdominal pain

An 84 year old woman presented with acute, diffuse, colicky abdominal pain associated with intermittent vomiting, and had a six week background of general malaise and weight loss. Her medical history included atrial fibrillation, peripheral vascular disease, transitional cell carcinoma of the bladder, pulmonary embolism, and chronic obstructive pulmonary disease.

At initial assessment, the patient's temperature was 36.7°C, pulse 112 beats/min irregular, and blood pressure 91/71 mm Hg. Her respiratory rate was 20 breaths/min and her blood oxygen saturation was 98% on 15 litres oxygen.

On examination, she was dehydrated but alert and oriented. Her abdomen was rigid with absent bowel sounds. Digital rectal examination was tender for the patient and there were firm stools in the rectum. Both feet were pale, cold, and



cyanosed with a capillary refill time of more than 5 seconds.

The patient's arterial blood gas results on 10 litres oxygen were as follows: pH 7.33; PCO_2 5.1 mm Hg; pO_2 24.7 mm Hg; lactic acid 2.7 mmol/l; base excess 5.9 mmol/l; and HCO_3^- 20.8 mmol/l. Her blood results were: haemoglobin 13.1 g/dl; white cell count $57.9 \times 10^9/l$; neutrophils $54.6 \times 10^9/l$; Na^+ 138 mmol/l; K^+ 4.2 mmol/l; urea 25.8 mmol/l; creatinine 363 µmol/l; and C reactive protein 307 mg/l. Her liver function tests were normal.

Electrocardiography confirmed atrial fibrillation. Urgent computed tomography of the abdomen and pelvis was performed the same day.

- 1 What is the diagnosis?
- 2 What signs on the computed tomogram point to the diagnosis?
- 3 What are the causes of this condition?
- 4 How should this patient be managed?

Submitted by James K K Chan, Richard Lovegrove, Matt Dunckley, Eric K Woo, and Marwan Farouk

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ON EXAMINATION QUIZ

Orthopaedics: fractures and dislocations

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 orthopaedics (fractures and dislocations) and is taken from the OnExamination revision questions for the Professional and Linguistic Assessments Board exam.

A three year old boy was playing with his brother when he fell. He cried immediately and refused to walk, so his mother carried him to hospital. He was a full term normal delivery and had no neonatal complications. His immunisations were up to date, and he had no family history or social

history of note. On examination he looked well. He had slight swelling, warmth, and discomfort on the lower third of the left tibia, and refused to bear weight. He had no dysmorphic features. Anterior-posterior and lateral radiographs of the tibia were normal.

What is the most likely diagnosis?

- A Ankle fracture
- B Ankle sprain
- C Fibular fracture
- D Knee dislocation
- E Tibial fracture