

## Spontaneous splenic rupture: a rare complication of Q fever in Australia

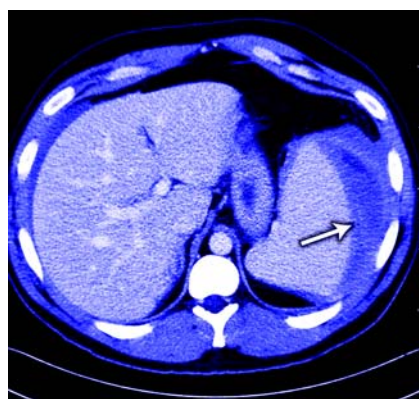
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**TO THE EDITOR:** Q fever is a serious disease caused by *Coxiella burnetii*, and usually occurs in people exposed to livestock. In Australia, acute Q fever generally manifests as nonspecific febrile illness. We report a case of spontaneous splenic rupture as a complication of acute Q fever acquired in Australia.

A 29-year-old, previously well man presented in March 2005, with 5 days of fever, rigors and severe headache. On examination he had a temperature of 40°C, was tachycardic at 100 beats per minute, but normotensive. There were no focal examination findings. Investigations revealed thrombocytopenia at  $123 \times 10^9/L$ , a normal white cell count, and clear chest x-ray. The patient worked at a factory that processed animal placentas and fetal products. A provisional diagnosis of Q fever was made based on the illness and this exposure. The man was admitted and treated with empiric doxycycline, penicillin, and ceftriaxone.

On Day 1 of the admission, he developed sudden, severe, left upper quadrant abdominal pain with shoulder tip radiation, diaphoresis and hypotension. An urgent computed tomography scan of the abdomen revealed splenomegaly with a diameter of 14 cm, and a crescentic, subcapsular splenic haematoma with rupture

### Abdominal computed tomography scan



A crescentic, subcapsular splenic haematoma is visible (arrow).

into the peritoneal space (Box). There was no history of trauma. He was admitted to the high dependency unit for monitoring. His haemoglobin level dropped from 151 g/L to 102 g/L, but he was managed conservatively and discharged from the high dependency unit 24 hours later.

Acute Q fever was confirmed by polymerase chain reaction on Day 2, and antibiotic therapy was simplified to doxycycline 100 mg twice daily for 14 days. He was discharged from hospital on Day 5, and recovered fully. Seroconversion to Q fever was subsequently confirmed. His workplace now practices Q fever prevention policies, including pre-employment vaccination.

Common presentations of Q fever include nonspecific febrile illness, pneumonia and

hepatitis. There are five reported cases of Q fever associated with spontaneous splenic rupture, but this is the first Australian case.<sup>1-5</sup> The other patients presented with flu-like symptoms and abdominal pain of 2-14 days' duration, and required splenectomy between Day 1 and 4 of admission.

Clinicians should be aware of splenic rupture as a potential complication of Q fever in Australia.

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