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Pneumonia, hepatosplenomegaly and ascites:

An unusual presentation of acute Q fever infection treated successfully with macrolides.

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Abstract

We report a case of acute Q fever pneumonia with hepato-splenomegaly, mild hepatic involvement and ascites in a previously healthy 29-year-old man. The diagnostic work up for an underlying disease was negative. His medical condition subsequently improved with antibiotics.

Case Report

A 29-year-old man was admitted to the hospital because of fever, abdominal discomfort with nausea and vomiting and an abnormal chest X-ray. The patient had been in good health until three days earlier when he developed fever up to 39°C. The fever was accompanied by malaise, epigastric pain, nausea and vomiting.

The patient was a salesman with no significant past and recent medical history. On admission his temperature was 39.4°C and the patient appeared acutely ill with slight abdominal distension and diminished bowel sounds. Abdominal palpation revealed a painful epigastrium.

Laboratory tests revealed normochromic, normocytic anemia (hemoglobin 10.8 g/dl), thrombocytopenia (platelet count 118,000 mm^3), and normal white cell count of 4,600. Direct Coomb's test was negative. Clotting parameters were normal. Blood chemistry revealed hyponatremia (125 mEq per liter), elevated aminotransferases (AST: 67 IU/L, ALT: 66 IU/L) lactic dehydrogenase (315 IU/L) and hypoalbuminemia (albumin: 3.1 g/dl).

Chest X-ray on admission was consistent with pneumonia of the left lower lobe (Figure 1). Abdominal sonography on admission revealed hepato-splenomegaly (Figure 2) and ascitic fluid collection without any other abnormal findings (figure 3). Blood cultures were sterile whereas the sputum culture revealed no pathogen.

The diagnosis of community acquired pneumonia was made and the patient was commenced on intravenous erythromycin. He was discharged well on oral clarithromycin. Retrospectively, a serologic diagnosis of *Coxiella*

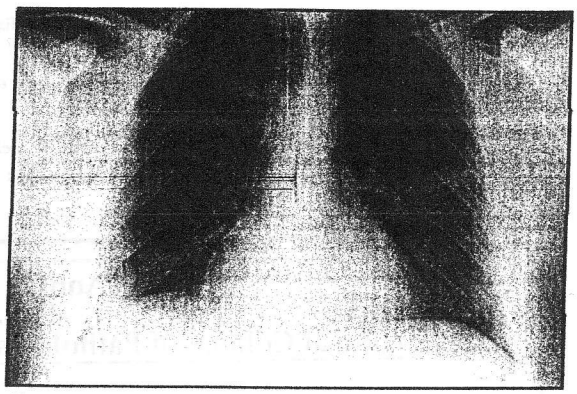

Figure 1. Posterior-anterior radiography of the thorax, show's inflammatory infiltration of the apical segment of the left lower pulmonary lobe.

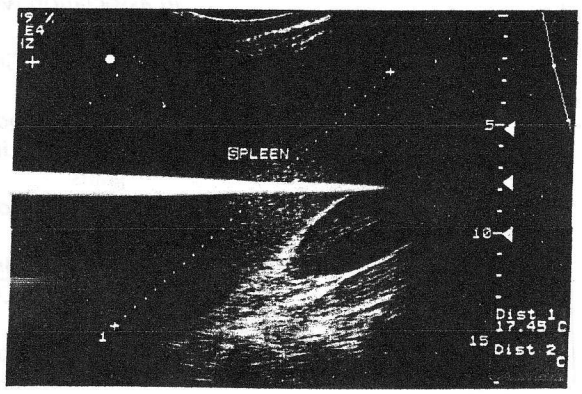

Figure 2. Ultrasonography of the left subdiaphragmatic space reveals an enlarged spleen of 17.5 cm length.

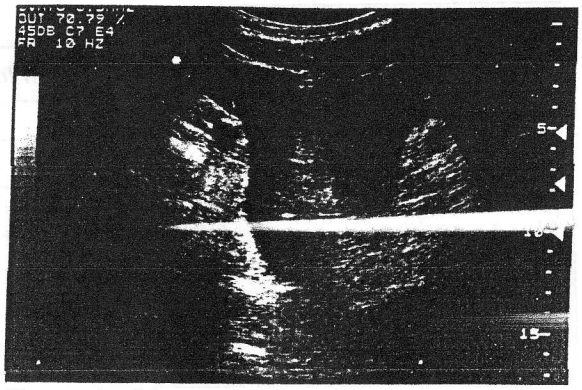

Figure 3. Ultrasonography of the lower abdomen demonstrates a large free intrabdominal fluid collection between the small bowel loops.

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Case Report

burnetti infection was established by immunofluorescence. On follow up examination three weeks after discharge the patient's blood tests and chest X-ray were normal and the ascitic fluid had completely resolved.

Pneumonia, hepatosplenomegaly and ascites without hepatic insufficiency or portal hypertension, due probably to peritoneal inflammation, in combination with hypoalbuminemia by *Coxiella burnetii*, is an unusual clinical presentation of acute Q fever. This organism was first described by Derrick in 1937.[1] It is a disease with a worldwide distribution.[2] Clinical features of the may vary from one area to another and pneumonia, hepatitis or a febrile illness[3,4] but the caused by *Coxiella burnetii* can mimic any *syndrome.*[5] *Pneumonia is the main clinical present* the disease in our area.[3] Hepatic involvement prevalent clinical feature of acute Q fever in Fran treatment of choice is tetracycline while macrolid failed in severe cases.[5]

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