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Case Report

Isolated splenic peliosis in an immunocompromised patient

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Background. Peliosis is a rare condition characterised by multiple cyst-like, blood-filled cavities within the parenchyma of solid organs, most commonly affecting the liver. Isolated splenic peliosis is an even more unusual phenomenon. Patients with AIDS may develop peliosis in association with bacillary angiomatosis. This is due to secondary infection with *Bartonella henselae* or a similar organism, *Rochalimaea henselae*.

Case presentation. A 45-year-old HIV-positive man on antiretroviral therapy presented with a left hypochodrial abdominal mass. Radiological and histopathological examination confirmed splenic peliosis.

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Background

Peliosis was first described in the liver by Schoenland in 1916 (cited by Gushiken[1]). Isolated splenic peliosis is extremely rare, and most cases are associated with peliosis hepatis. Establishing the incidence of splenic peliosis is difficult, since the condition usually remains asymptomatic or is discovered incidentally at autopsy or through imaging.[2]

Case presentation

A 45-year-old immunocompromised man on antiretroviral therapy presented with abdominal pain. Blood results showed him to have a CD4 count of 207 cells/μl with anaemia and thrombocytopenia on bone marrow aspirate. On examination a left hypochondrial mass was found. Contrast-enhanced computed tomography (Fig. 1) demonstrated a 24×21×13 cm splenic mass with solid and cystic components. The patient went on to have an elective splenectomy. Histopathological examination confirmed the diagnosis of splenic peliosis that had been suspected on radiological grounds. *Bartonella henselae*, an infection commonly associated with immunocompromise,[1,3] was negative.

Discussion

Peliosis is a pathological condition characterised by the gross appearance of multiple cyst-like, blood-filled cavities within solid organs. It was thought that peliosis develops exclusively in organs that are part of the mononuclear phagocytic system, but studies have shown that other organs such as the lungs, parathyroid glands and kidneys may also be affected. Splenic peliosis was first reported in 1978. Until then peliosis was thought to occur commonly in the liver.[3,4]

In patients with AIDS, an association between bacillary angiomatosis and parenchymal bacillary peliosis has been demonstrated. This is due to secondary infection with *B. henselae* or a similar organism, *Rochalimaea henselae*.[1,3] Both organisms cause fever and abdominal pain. Other infective agents such as hepatitis B and C, *Staphylococcus aureus* and tuberculosis are also thought to be associated with peliosis,[5] but were not identified in our patient.

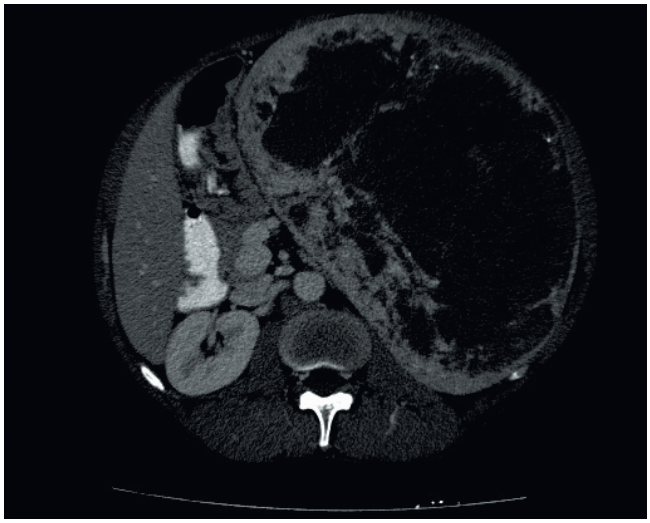

Fig. 1. Contrast-enhanced computed tomography scan of the abdomen revealing an enlarged spleen with solid components and hypodense cystic areas consistent with peliosis.

Once the presence of peliosis has been established, it has been proposed that all necessary investigations be pursued to exclude its involvement in other organs and to establish a possible cause.[4] Our patient proved to have isolated splenic peliosis. Spontaneous rupture of the affected organ is a consistent risk.

The incidental finding of cyst-like hypodense lesions that do not produce a mass effect in vessels on contrast-enhanced computed tomography should alert the radiologist to the possibility of peliosis. A high index of suspicion of peliosis is of importance in recognising the risk of spontaneous splenic rupture and avoiding interventional procedures. The role of elective splenectomy in splenic peliosis is not known.[4]

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