## Imagens em Medicina

**Images in Medicine** 

## Hepatic brucelloma

Bruceloma hepático

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'e report the case of a 44 year-old woman hospitalized with evening fever, pain in the right hypochondrium, weakness and weight loss over the last 4 months. At the age of 16 she had acute brucellosis. Physical examination was normal. A biological evaluation demonstrated: positive RCP, increased ESR, normocytic normochromic anemia, normal white cell count and mildly altered liver function tests. Serial hemocultures were sterile. Serological tests, autoimmunity and tumor markers were negative. Diagnostic serology for brucellosis was positive: agglutination and Coombs tests (1:320), Rose Bengal stain and ELISA (positive IgG and negative IgM). Abdominal ultrasonography (US) revealed a solid hypoechoic lesion with central calcification in the right hepatic lobe, confirmed on CT-scan (large mass with central calcification and peripheral hypodense areas - Fig. 1). CT guided biopsy revealed granulomas. No microorganisms were growing on the cultures. Rifampicin and Doxycycline (R+D) were initiated. The patient remained febrile after six weeks so we attempted percutaneous drainage but without success. She was therefore submitted to resection



FIG. 1

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by laparotomy. Histology showed granulomas (Fig. 2). The cultures were negative. The patient received R+D for 4 months. Six months later she remains symptom free.

H e p a t i c brucelloma is a

rare localization by *Brucella*, with only 40 reported cases up to 2002. Clinical manifestations can mimic tumors as well infectious diseases. Diagnosis is based on the association of characteristic imaging features (single or multiple central calcium deposits, cystic features and the tissue component in the periphery of the process), positive serology and hepatic granulomas. A review of the literature shows that the imaging obtained by US and CT-scan provide diagnostic criteria, although these are not specific. 1

This condition is the result of calcification of a granulomatous reaction induced by persistent *Brucella* in the macrophages, in the context of a latent and chronic disease. Diagnosis is complicated by the low rate of positive cultures and low antibody titers. Prolonged antibiotic therapy is mandatory, complemented, if necessary, by percutaneous or surgical drainage.<sup>2</sup>

## References

O. Sisteron, J. Souci, P. Chevallier, E. Cua, J.N. Bruneton. Hepatic abscess caused by Brucella US, CT and MRI findings- Case report and review of the literature. Journal of Clinical Imaging 2002;26: 414-417.

Matthew L. Lim, Leland S. Rickman. Brucellosis. Infectious Diseases in Clinical Practice 2004; 12: 7-14.