

Soft-tissue case 46. Diagnosis

Splenic hydatidosis

Ultrasonography (Fig. 3) revealed a well-defined cystic lesion (large arrows) within the spleen, with multiple smaller daughter cysts (small arrows). Highly echogenic material was also seen, which was due to hydatid sand, infolded membranes and debris. No cysts were seen in the liver, kidneys or pancreas.

Abdominal computed tomography (Fig. 4), contrast enhanced, confirmed the presence of daughter cysts (small arrowheads) within the cystic splenic lesion (large black arrowheads), besides showing calcification (open arrowhead) and post-contrast enhancement of the cyst wall. A radiologic diagnosis of splenic hydatidosis was made. Samples sent later for serologic testing gave positive results for echinococcal disease. The boy underwent surgery, and histologic exami-

nation of the cysts confirmed the diagnosis of hydatid disease of spleen.

Cysts of the spleen may be parasitic, epithelial-lined (true cysts) or nonepithelial-lined (false cysts).¹ Other cystic lesions include cystic lymphangiomas of spleen and pancreatic pseudocysts. Parasitic cysts are caused by infection with *Echinococcus granulosus*, the spleen is involved in less than 2% of all human infestations by *Echinococcus* and these cysts more frequently involve the liver and lung.² The signs and symptoms may be nonspecific and include abdominal pain, enlarged spleen and fever. Secondary infection, cyst rupture and anaphylactic shock may occur. On ultrasonography, these parasitic cysts appear as anechoic lesions with possible daughter cysts and calcification or as solid masses with fine internal echoes and poor distal enhancement. The computed tomographic appear-

ance consists of well-defined, single or multiple hypodense masses, with characteristic multiple septae, indicating daughter cysts. There is usually a thick cyst wall that enhances when contrast medium is infused intravenously. The combination of characteristic computed tomographic findings and a suggestive history and clinical presentation should point to this diagnosis before any percutaneous or surgical manipulation is carried out that may prove dangerous.

[Return to Presentation page 278]

References

1. Dachman AH, Ros PR, Murari PJ, Olmsted WW, Lichtenstein JE. Nonparasitic splenic cysts: a report of 52 cases with radiologic-pathologic correlation. *AJR Am J Roentgenol* 1986;147:537-42.
2. Franquet T, Montes M, Lecumberri FJ, Esparza J, Bescos JM. Hydatid disease of the spleen: imaging findings in nine patients. *AJR Am J Roentgenol* 1990;154:525-8.



FIG. 3.



FIG. 4.