

## Clinical Image

# Splenic Hydatid Cyst A Rare Topography of a Rare Disease Presentation of a Case

Navarro N<sup>1</sup>, Fagundez N<sup>2</sup> and Fraga S<sup>3\*</sup><sup>1</sup>Department of Surgery, Central Armed Forces Hospital, University of the Republic, Uruguay<sup>2</sup>Surgical Clinic 1, Pasteur Hospital, University of the Republic, Uruguay<sup>3</sup>Department of Emergency, Clinicas Hospital, Central Armed Forces Hospital, University of the Republic Service of Surgery, Uruguay

## Clinical Image

Hydatidosis is a cosmopolitan zoonosis caused by a parasite called *Echinococcus Granulosus*, with humans being an accidental guest [1]. In Uruguay, the prevalence in operated patients decreased from 20.7 in 1962 to 4.2/100,000 inhabitants after the adoption of specific health policies [1,2]. The hydatid cyst in humans is located in the liver in 60% of cases and in the lung in 30%. Between 5% to 10% of these patients there is synchronous involvement. In the remaining 10% it includes the rare locations within which the Mediastinum, Bone, Brain, Kidney, Pancreas and Spleen have been reported. Primary splenic localization (from the hexacanth embryo) is uncommon, accounting for only 1% to 2% of all forms [1,3,4].

We present the case of a woman, 55 years old from rural areas, smoking, chronic bronchi, hysterectomized and cholecystectomized. During routine imaging control, being asymptomatic, abdominal ultrasound was performed that showed a cystic lesion in the spleen, with heterogeneous content, 5 cm to 8 cm in diameter. The findings were described as compatible with a Splenic Hydatid Cyst. Given this finding, an abdomino-pelvic CT scan was performed that showed a unique cystic image, with septa inside that expands in the splenic parenchyma, compatible with hydatid cyst (Figure 1). No cysts were evidenced in other topographies. Serological tests for hydatidosis were positive. Its surgical indication was decided after treatment with Albendazole. A splenectomy was performed by previous conventional approach isolated from the field with compresses embedded in 33% hypertonic serum solution. No previous evacuation of the cyst was performed (Figures 2 and 3). There were no intraoperative or postoperative complications, granting him discharge on the fourth day prior to vaccination against capsulated germs. Pathological anatomy confirms the presence of a complete splenic hydatid cyst. As

for the follow-up, there was no recurrence of the disease or distant complications during the year following the surgery, granting the definitive discharge.

Splenic hydatid cysts account for 0.5% to 8% of all hydatidosis, with primary hydatidosis of the spleen being 1.5% to 3.5% of abdominal hydatidosis [5]. According to the literature analyzed, almost 30% of cases of splenic hydatid cysts are an incidental finding, as in our case [5,6]. Ultrasound is used for screening with a sensitivity of 90% to 95% and specificity of 93% to 100% [3,5]. CT has greater sensitivity, greater efficacy in determining number, size, topography, detecting recurrences and assessing complications [7]. Resonance is a high-cost method, with greater sensitivity for small lesions, which sees its main use currently in the assessment of complications such as transit, evacuation or communication of the cyst.

Medical treatment is an alternative in inoperable patients, hyaline cysts less than 7 cm, multiple or multivisceral, bone hydatidosis, cardiac. It has a complete response between 10% and 30% and a high rate of recurrence [1,6]. Conservative surgical procedures such as partial splenectomy, enucleation, cyst deroofing and omentoplasty are used for hyaline, small, emergent, peripheral hydatid cysts with sufficient remnant of healthy parenchyma and is of choice in children [1,3,7,6]. Cystosotomy has fallen into disuse due to its high morbidity and mortality [1]. Although the procedure is feasible to perform by laparoscopic approach, the low frequency of the disease, the absence of laparoscopic instruments specially designed to avoid contamination and the risk of intraoperative rupture of the cyst with



**Figure 1:** Single multivesicular multiseptate cystic image is displayed, with calcifications, compatible with splenic hydatid cyst.

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**\*Corresponding author:** Sebastian Fraga, Department of Emergency, Clinicas Hospital, University of the Republic, Service of Surgery, Central Armed Forces Hospital, Uruguay, E-mail: sebastianfraga@gmail.com



**Figure 2:** Intraoperative view of the splenic lesion replacing the lower pole of the spleen.



**Figure 3:** Specimen.

spread of the disease to the peritoneal cavity mean that in our case we opt for conventional surgery.

In conclusion, the primary splenic hydatid cyst is a rare disease even in endemic areas, which constitutes a challenge in terms of diagnosis and therapy. It occurs in most cases asymptotically, being diagnosed by imaging finding. The treatment is multimodal and individualized, being the surgical treatment the one that allows a comprehensive solution of the pathology.

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