Splenic pseudocyst. A case report

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Background: Splenic pseudocysts are rare lesions. Little information has been described in the literature in this regard. Its presentation is asymptomatic, causing symptoms when the size of the lesion causes compressive symptoms to neighboring organs. The management provided will depend on the type of injury to be treated, so it is important to learn to differentiate certain characteristics between these types of injuries. In this case we reported the rare case of splenic pseudocyst and the management given in our Institute. We presented the case of a young women who noticed an increased of the abdominal perimeter and denied any other symptoms, who after surgical treatment had a favorable evolution.

Key words: pseudocyst, spleen, splenic cysts, surgery.

Case Report

General Surgery

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Cysts and tumors of the spleen are uncommonly encountered in clinical practice and represent challenges in the management. The splenic masses are divided in solid masses o cystic masses (2). Solid masses could be lymphoid (Hodgkin or no Hodgkin) or non lymphoid lesions (benign or malignant). And the cystic masses of the spleen could be divided into primary (true cyst) or false (also called pseudocyst). (2)

The splenic cyst is a rare condition present in 0.07% of world population. It described only 800 cases in the world literature, and one of the rarest forms is the pseudocyst of spleen (1). In Mexico the incidence of this pathology is unknown (3).

The splenic cyst are divided in different ways. The cysts classification used by Martin divided into 2 groups, true or false cyst, the groups are considered based on the presence or absence of internal epithelial lining (5). It is present in primary or true cysts and absent in secondary (3,4). Secondary cyst also called false cyst or pseudocyst (3).

The primary cyst could be parasitic or non-parasitic. Nonparasitic include congenital or neoplastic cyst (lymphangioma, metastases, hemangioma). And the secondary cyst which represent approximately 80% of all splenic cysts are originate from a past injury, infarction, or infection (2,3).

Cyst lesions appear commonly in second or third decade of life, more frequent in women. Usually, it appears like asymptomatic abdominal mass in 30 to 45% of cases, and they are discovered incidental scans for another reason. The symptomatic presentation occurs when cyst is more than 6 cm. And the presentation is due to gradual compression of the surrounding structures and expansion of the size of the cyst itself (2).

Secondary lesions or pseudocyst are more common after traumatic injury. Other causes are secondary to tuberculosis, malaria or mononucleosis. This lesion are presented in young people, of middle age, more common in women. Generally, it is after encapsulation of a spleen hematoma, which is absorbed and it has a false wall (2,3).

The pseudocyst with less than 5 cm are usually treated with observation and follow with ultrasound. Lesions more than this are usually removed with surgery.

In this case we reported the rare case of splenic pseudocyst, the management given in our Institute.

Case report

A 26-year-old woman with no significant history began the current condition 11 months prior to going to the consultation when she noticed an increase in abdominal volume in the left hypochondrium, in addition to a feeling of early satiety, she denied abdominal pain or weight loss, and went for an evaluation where a tomographic study was performed. She reported a giant splenic cyst, so she was referred to the General Surgery service.

The physical examination revealed an increase in volume in the left hypochondrium, splenomegaly was palpable that exceeded 8 cm below the costal margin.

In his laboratories we found leukocytes of 5.2, hemoglobin of 10.9, hematocrit of 32.8, platelets 220, glucose 83, creatinine 0.53, INR 1.08, TP 12.8, TTP 35 . He has a tomography showing a cystic lesion dependent on the upper splenic pole of 21.1 x 26.9 x 26.6 cm, with an approximate volume of 7,850 cc.

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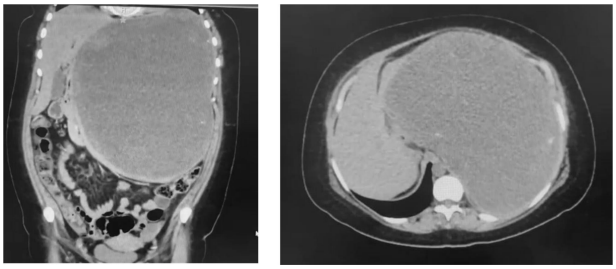

Figure 1. CT Scan showing a cystic lesion dependent on the upper splenic pole of 21.1 x 26.9 x 26.6 cm, with an approximate volume of 7850 cc.

Which generates displacement of the gastric chamber and duodenal portion, discrete elevation of the left hemidiaphragm.

A conventional splenectomy was performed where a 30x26x10cm cystic lesion was found in the lower pole, from which 8 liters of a yellowish liquid drained. The patient had an adequate post-surgical evolution, so she was discharged two days later without complications.

The histopathological report reports a Pseudocyst with a 29 cm long axis with extensive areas of coagulative necrosis, fibro mucinous content, with areas of solid cystic appearance, areas of necrosis and hemorrhages, wall thickness of 0.2 to 0.7 cm.

Discussion

Splenic pseudocysts are more common than true cysts, only 25% of those pseudocysts are non-traumatic, like in our case. (1). Clinically it is difficult to differentiate primary from secondary cysts (2). It is important to distinguish between benign or malignant lesions, and for this the histopathological study is the only one that can provide us with this information (1).

The treatment is similar to primary or secondary cyst, in cyst smaller than 5 cm may be observed and followed with serial US, and the surgical approach should be chosen for larger masses (2).

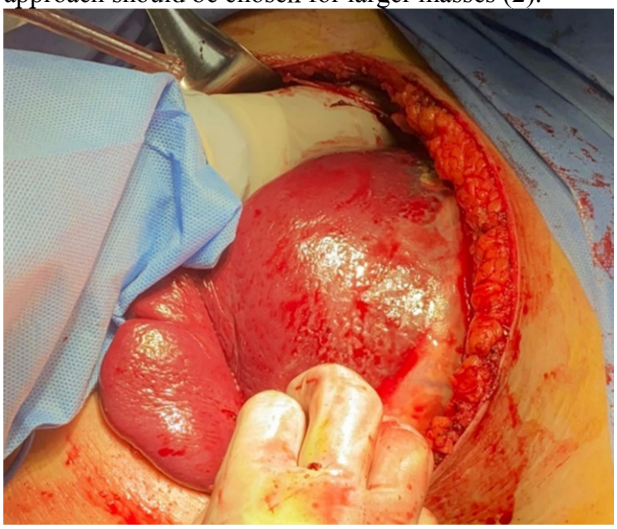

Figure 2. Transoperative image showing splenic pseudocyst.

Figure 3. Post-operatove image showing the pseudocyst after resection.

Since 1952, with the demonstration of the increased mortality of splenectomized patients, interest has been shown in partial splenectomy. Partial splenectomy has been reported only for solitary cysts of the spleen. In the case of solid tumors, the entire tumor must be removed without rupture and adequate margins. For staging surgery such as Hodgkin's disease, the risk of misstaging with partial splenectomy has been reported and is therefore not advised. For primary splenic tumors, these principles are best achieved with a total splenectomy. If the spleen has tumors that are clearly part of disseminated metastases, a splenic biopsy is sufficient (2, 5).

In this case, the diameter of the mass was approximately 29 cm by imaging study, coupled with the patient's compressive symptoms, surgical management with splenectomy and subsequent histopathological study was the most appropriate management.

Conclusion

Splenic pseudocysts are a rare entity, which is increasingly diagnosed thanks to the support of incidental imaging studies. It is important to provide adequate follow-up to the patient, and identify the type of lesion to be treated, differentiate between a solid or cystic lesion, benign or malignant to determine the management to follow.

Conflicts of interests

The authors declare no conflicts of interests.

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