Posttraumatic abdominal and thoracic splenosis.

Clinical History:

Thoracoabdominal CT after administration of contrast material (CECT) control study in a patient with Non-Hodgkin Lymphoma in remission. The patient had been in a motor vehicle accident which resulted in diaphragmatic rupture and rib fractures.

Imaging Findings:

Thoracoabdominal CT after administration of contrast material (CECT) revealed the presence of a round homogenously enhancing mass in the left upper thorax, measuring approximately 30 mm, adjacent to another similarly enhancing nodule of 7 mm in size (Figure 1a and 1b). Healed fractures in the 5th, 6th and 7th ribs of the left hemithorax and sequelae of diaphragmatic rupture with a small round well circumscribed intraabdominal nodule of 12mm in size (Figure 2a and 2b). Absence of the spleen is consistent with a history of splenectomy, observing a round homogeneously enhancing mass in splenic angle measuring 31 mm and similarly enhancing 14 mm nodule anterior to the left hepatic lobe (Figure 3a and 3b).

Discussion:

Splenosis is defined by the presence of normal splenic tissue in abnormal locations. The most common sites include the mesentery, peritoneum, and omentum presenting significant variability in shape and size [1].

Unlike accessory spleens, splenosis occurs as a result of dissemination of splenic tissue and thus, derives its irritation from the tissues nearby. Thorax is an infrequent site for splenosis, commonly requiring a history of splenectomy in association with diaphragmatic disruption [2].

Although most patients are asymptomatic, recurrent hemoptysis and pleurisy have been reported. The importance of acknowledging this entity is reassured by its ability to mimic malignant disease [3].

This case presents some classic CT findings such as [4].

- Multiple variably sized homogeneously enhancing nodules and masses within the left hemithorax and abdomen.
- Absence of spleen in splenic angle.
- Diaphragmatic rupture in association with healed fractures, consistent with the history of traumatic injury as a result.
of motor vehicle accident reported by the patient.

As for differential diagnosis, the history of Hodgkin's lymphoma should prompt the possibility of recurrence. However several considerations should be made [5]:

- The enhancement pattern is unusual for a thoracic lymphoma.
- An association with pleural effusion would be expected.
- And, most importantly, control CECT have been reporting stability for a period of 5 years.

A forethought for extramedullary intrathoracic hematopoiesis should also be made, keeping in mind that it has a predisposition for posterior mediastinum in a bilateral paravertebral distribution.

Other diagnostic options such as fibrous tumors of the pleura, malignant mesothelioma and invasive thymoma, although inconsistent with the multiple nature of the nodules, should be kept in mind [5].

Technecium 99m sulfur colloid scintigraphy of the liver and spleen has been reported as being useful in cases of diagnostic uncertainty [6].

The asymptomatic thoracic splenosis should not be surgically removed, while the procedure might actually make the patient prone to infections with encapsulated microorganisms [7].

Homogeneously enhancing round shaped multiple nodules with the history of traumatic diaphragmatic disruption in association with splenectomy, should indicate the diagnosis of thoracic splenosis.

**Differential Diagnosis List:** Posttraumatic abdominal and thoracic splenosis, Lymphoma, Extramedullary hematopoiesis, Malignant pleural disease, Invasive Thymoma

**Final Diagnosis:** Posttraumatic abdominal and thoracic splenosis.

**References:**


Figure 1

Description: Thoracoabdominal CECT revealed the presence of a round homogenously enhancing mass in the anterior left mediastinum, measuring approximately 30 mm and another similarly enhancing nodule of 7 mm. Healed fractures of 5th, 6th and 7th left ribs. Origin: Nerses Nersesyan. Department of Radiology, Hospital Clínico Universitario de Valencia, Valencia, Spain.
Thoracoabdominal CECT revealed the presence of a round homogenously enhancing mass in the anterior left mediastinum, measuring approximately 30 mm and another similarly enhancing nodule of 7 mm. Healed fractures of 5th, 6th and 7th left ribs. **Origin:** Nerses Nersesyan. Department of Radiology, Hospital Clínico Universitario de Valencia, Valencia, Spain.
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