GIANT SPLENIC HEMATOMA CAN BE A HIDDEN CONDITION

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An otherwise healthy 28-year old male presented to his general practitioner with dyspnoea in the morning and abdominal discomfort through months. Four months earlier, he had experienced a blunt trauma to the left side of his abdomen. Abdominal ultrasonography revealed a splenic hematoma and the patient was admitted to hospital. Vital signs were normal, and blood samples revealed a marginal anaemia and elevated C-reactive protein, but were otherwise normal. Computed tomography showed an 18 centimetre wide splenic hematoma. The patient was referred to another hospital for conservative treatment in the outpatient clinic.

Key words: blunt trauma, spleen, splenic hematoma

The spleen and the liver are the organs most commonly damaged during blunt abdominal trauma. In most situations, high-energy traumas will lead to patient admission to a hospital and trauma protocol computed tomography scan, visualizing the damaged organs.

While these trauma protocols facilitate a fast diagnosis in most cases, missed blunt traumas represent a clinical challenge both in general practice and in the hospitals.

In this case story, an unusual case of a subclinical giant splenic hematoma is presented.

CASE REPORT

A 28-year-old male fell during skiing in January and had a blunt trauma to the left side of his abdomen without penetration of the skin. Unaffected by the trauma, the skiing vacation was continued, as was the patients’ daily life afterwards. In the following months, the patient was physically active, preparing for a marathon run, which he completed in May. He was, however, experiencing persistent abdominal discomfort and dyspnoea, especially in the morning. For this reason, the patient contacted his general practitioner, who referred the patient to abdominal ultrasonography the same day. This examination revealed a massive splenic hematoma, for which the patient was admitted to our department.

On admission, the patient was afebrile (37°C) and had unremarkable heart rate (58/minute), blood pressure (143/70 mm Hg), oxygen saturation (99%), and respiratory rate (14/minute). Clinical examination found normal heart- and lung auscultation, while the abdomen was soft, with a palpable mass in the upper left quadrant. Blood hemoglobin was 13.2 g/dL and plasma-C-reactive protein was 40 mg/L. Remaining blood analyzes were normal, including electrolytes, kidney- and liver parameters. Computed tomography of the abdomen with intravenous contrast revealed a giant splenic hematoma with a diameter of 18 centimeters, surrounded by splenic tissue and peripheral calcifications. The estimated volume of the hematoma was 2.6 liters. No other pathology was found, safe for the displacement of organs caused by the hematoma (fig. 1). Since the patient had no symptoms requiring acute intervention, he was discharged the next day, and referred to another hospital for a conservative non-operative approach.
Giant splenic hematoma can be a hidden condition

DISCUSSION

Blunt abdominal trauma can lead to splenic rupture, causing heavy hemorrhage in the peritoneal cavity. Symptoms most often include signs of hypovolemia: tachycardia, hypotension, and hyperpnoea. In more discrete cases, patients can complain of discomfort in the upper left quadrant and pain radiating to the left shoulder (Kehr’s sign, caused by irritation of the diaphragm). The hemorrhage can be limited by the splenic parenchyma, and thereby forming a splenic hematoma. In the present case, it is remarkable that the patient was able to continue his daily activities unrestricted and even complete a marathon run.

Delayed presentation of a splenic lesion is previously described in the literature (1). An older case series include 11 patients with delayed presentation of a splenic lesion (three days – two years), where ten of the patients were treated operatively (2). Spontaneous splenic rupture in patients treated conservatively has been reported sparsely (3).

Conservative management of splenic injury is safe, provided that the patient is haemodynamically stable (4). By this approach, a preservation of the patients’ immune status is done, and the risk of overwhelming post-splenectomy infection is avoided. This condition has a lifetime prevalence of 5% and carries a mortality of up to 50% (5). In the case of splenic injury and hemodynamically unstable patients, emergency splenectomy is the primary treatment.

As is the case in this case report, previous blunt abdominal trauma – even months or years ago – does not rule out splenic injury and persistent splenic hematoma. Abdominal discomfort and relevant trauma should therefore lead to referral to imaging of the abdomen.

Fig. 1. Axial and coronal computed tomography scan with intravenous contrast, showing a giant splenic hematoma in an otherwise healthy 28-year old male.
REFERENCES


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