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journal homepage: www.casereports.comTorsion of a huge accessory spleen in a 20-year-old patient[☆]Vyacheslav Bard^{a,*}, Natalie Goldberg^b, Hanoch Kashtan^a^a Division of General Surgery, Rabin Medical Center, Campus Beilinson, Affiliated with Sackler Faculty of Medicine, Tel Aviv University, Israel^b Institute of Radiology, Rabin Medical Center, Campus Beilinson, Affiliated with Sackler Faculty of Medicine, Tel Aviv University, Israel

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ABSTRACT

INTRODUCTION: Accessory spleen is a rare condition. Torsion of accessory spleen can lead to acute abdomen.**PRESENTATION OF CASE:** We describe a young woman with an acute abdomen caused by torsion of accessory spleen. Abdominal computed tomography angiography (CTA) demonstrated an ischemic giant accessory spleen with a twisted vascular pedicle. An emergency laparotomy was performed with resection of the infarcted accessory spleen.**DISCUSSION:** Accessory spleen is a rare and asymptomatic condition. Torsion of accessory spleen is also uncommon. Abdominal pain is the main symptom. CTA is effective in reaching a diagnosis. Definitive treatment of an acute abdomen due to accessory splenic torsion is emergency accessory splenectomy.**CONCLUSION:** Elective accessory splenectomy should be recommended for known giant accessory spleen to prevent complications in future.

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Introduction

Accessory spleen (*supernumerary spleen, splenule, or splenunculus*) is a focus healthy of splenic tissue separated from the main body of the spleen. Torsion of accessory spleen is not common and it represents about 0.2–0.3% of splenectomies.^{1,2} We present a case of acute torsion of a previously diagnosed huge accessory spleen in a young patient.

Case report

A 20-year-old woman was admitted to our department with a 5-day history of left-sided abdominal pain accompanied by loss of appetite and a single vomit. Ten years earlier, a diagnosis of accessory spleen had been made. It was first found on ultra sound in the left low quadrant of the abdomen and measured 8.3 cm. A 99-m technetium sulfur colloid scintigraphy confirmed the presence of splenic tissue. Three years later, a routine ultrasound showed enlargement of the accessory spleen to 12 by 7 cm. Until this

episode, she was asymptomatic. Her past and family history was otherwise non-contributory.

On admission, she was hemodynamically stable and alert. Physical examination revealed a soft abdomen and a tender palpable mass in the left side of her abdomen. Abdominal computed tomographic angiography (CTA) demonstrated a huge non-enhancing mass in left abdomen measured 17 cm in the largest diameter (Fig. 1) consistent with an ischemic giant accessory spleen. A twisted vascular pedicle was attached to the lower pole of a small native spleen in its normal anatomical location.

The patient underwent a small midline laparotomy. On exploration, an ischemic accessory huge spleen on a long twisted pedicle was found (Fig. 2). A normal spleen was found in its natural place. The infarcted accessory spleen was resected. Recovery was uneventful.

Discussion

Accessory spleens are found in approximately 10% of population and are typically approximately 1 cm in diameter.² Most are asymptomatic and are discovered incidentally during investigation of an unrelated problem.^{1,3} The incidence of accessory spleen at post-mortem is about 20%.^{1,2} The most frequent locations are posteromedial to the spleen (22%); anterolateral to the upper pole of the left kidney; and lateral, posterior, and superior to the tail of the pancreas.^{1,2}

There are some situations when an accessory spleen can become a problem. Torsion of accessory spleen is one of the causes of ischemia of the spleen. The most common symptom is abdominal

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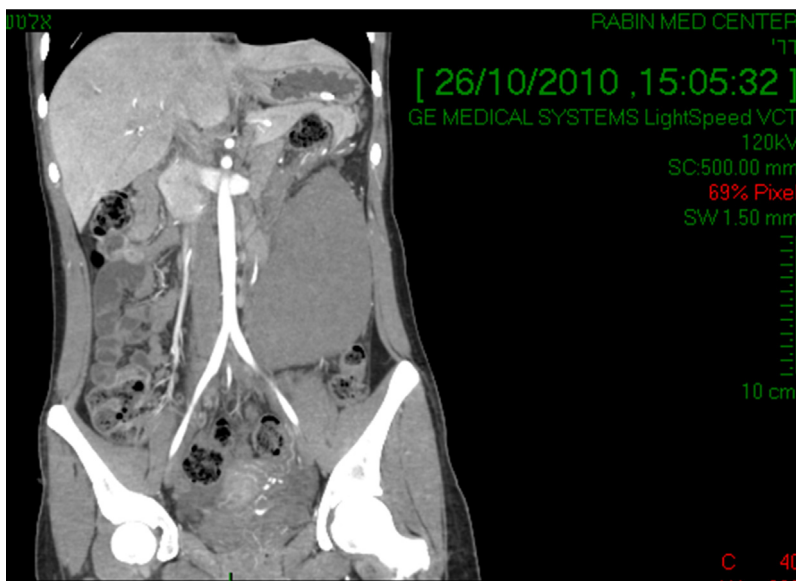


Fig. 1. Aciform splenic enhancement artifact (occurs during the early phase of contrast enhancement) on CTA scan shows alternating bands of high and low attenuation in a normal spleen. No enhancement was seen in infarcted giant accessory spleen with twisted long vascular pedicle.

pain due to necrosis. There are few reports describing torsion of accessory spleen presenting as an acute abdomen, most of them in childhood, but also a few in elderly patients.^{2,3,5} Torsion of an accessory spleen does not relate to the time of diagnosis, size and localization of the spleen or the age of the patient. Torsion of an

accessory spleen should be considered in the differential diagnosis of acute abdomen.

Conclusion

The question as whether or not to perform a splenectomy for an asymptomatic known accessory spleen is not well answered in the literature. Some authors recommend surgery only in symptomatic patients.^{4,6} However, “a prophylactic splenectomy” should be considered for a known accessory spleen that increases in size during follow up or has a reasonable potential for complications.

Authors contribution

Dr. Bard was the patient’s surgeon and the author of the article. Dr. Goldberg conducted a radiological diagnostic test. Prof. Kashtan – chief of Surgical Department and supervisor.

Conflict of interest

None.

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None.

Ethical approval

Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal on request.

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Fig. 2. Ischemic spleen with twisted vasculature.

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