Torsion 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, Beilinson, Affiliated with Sackler Faculty of Medicine, Tel Aviv University, Israel
b Institute of Radiology, Rabin Medical Center, Beilinson, Affiliated with Sackler Faculty of Medicine, Tel Aviv University, Israel

A R T I C L E   I N F O

Article history:
Received 19 September 2013
Accepted 17 December 2013
Available online 27 December 2013

Keywords:
Accessory spleen
Torsion of spleen
Splenectomy

A B S T R A C T

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.

© 2013 The Authors. Published by Elsevier Ltd on behalf of Surgical Associates Ltd. All rights reserved.

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 99m 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 posterior-medial to the spleen (22%); anteriolateral 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
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.\textsuperscript{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.\textsuperscript{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.

**Funding**

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.

**References**

1. Timothy E. Torsion of an accessory spleen in en elderly patient. Postgrad Med J 1990;66:336–9.
2. Mortele KJ, Bart Mortele, Silverman SG. CT features of accessory spleen. AJR 2004;183:1653–7.
3. Freeman JL, Jafri SZ, Roberts JL, Mezwa DC, Shirkhoda A. CT of congenital and acquired abnormalities of the spleen. RadioGraphics 1993;13:579–610.

4. Impellizzeri P, Motalto AS, Borruto FA, Antonuccio P, Scalfari G, Arena F, et al. Accessory spleen torsion: rare cause of acute abdomen in children and review of literature. J Pediatr Surg 2009;44(September (9)):e15–8.

5. Perez Fontan FJ, Soler R, Santos M, Facio I. Accessory spleen torsion: US, CT and MRI findings. Eur Radiol 2001;11(3):505–12.

6. d’Halluim G, Menard J, Dessard P, Dauphin H, Deshayes M, Pierre F, et al. Torsion of the accessory spleen: an atypical etiology for acute abdomen. Gynecol Obstet Fertil 2001;29(November (11)):821–3.