

Splenic Arteriovenous Fistula with Pseudoaneurysm

Cagri Yurtsever¹ Murat Ak²

¹Department of Radiology, Sultan Abdulhamid Han Teaching Hospital, Istanbul, Turkey

²Department of Radiology, University of Pittsburgh, Pittsburgh, Pennsylvania, United States

Address for correspondence Murat Ak, University of Pittsburgh, 5115 Centre Avenue, Pittsburgh, PA 15232, United States (e-mail: akm@upmc.edu; yurtsevercagri@gmail.com).

J Gastrointestinal Abdominal Radiol ISGAR 2021;4:247–248.

A 24-year-old male patient with a history of laparoscopic splenectomy presented to the outpatient clinic with pain and fullness in the left upper quadrant of the abdomen. Physical examination and laboratory results were unremarkable. Contrast-enhanced computed tomography (CT) showed aneurysm with a maximum diameter of 30 mm on the distal part of the tortuous splenic artery and splenic arteriovenous fistula and early opacification of the splenic vein (►Fig. 1A, B). Three-dimensional CT reconstruction revealed aneurysm and connection between the splenic artery and vein (►Fig. 1C). Aneurysm was interpreted in favor of pseudoaneurysm in the case with a splenectomy history. Splenic artery pseudoaneurysm with splenic arteriovenous fistula infrequently occurs as a complication of splenectomy. Rupture and portal hypertension are potential complications.

This patient subsequently underwent endovascular intervention, treated with coil embolization, and has continued to do well on clinical follow-up visits.

Discussion

Occurrence of a splenic artery pseudoaneurysm with an arteriovenous fistula is a rare complication might be seen after splenectomy.¹ Rupture is the major risk of splenic artery pseudoaneurysm and mortality is almost inevitable if it ruptures.² Also, untreated splenic arteriovenous fistulas may cause portal hypertension.¹ Therefore, splenic pseudoaneurysm must be treated without delay regardless of their size, even if there is no bleeding due to high-rupture risk.^{2,3} Contrast-enhanced CT, CT angiography, and splenic

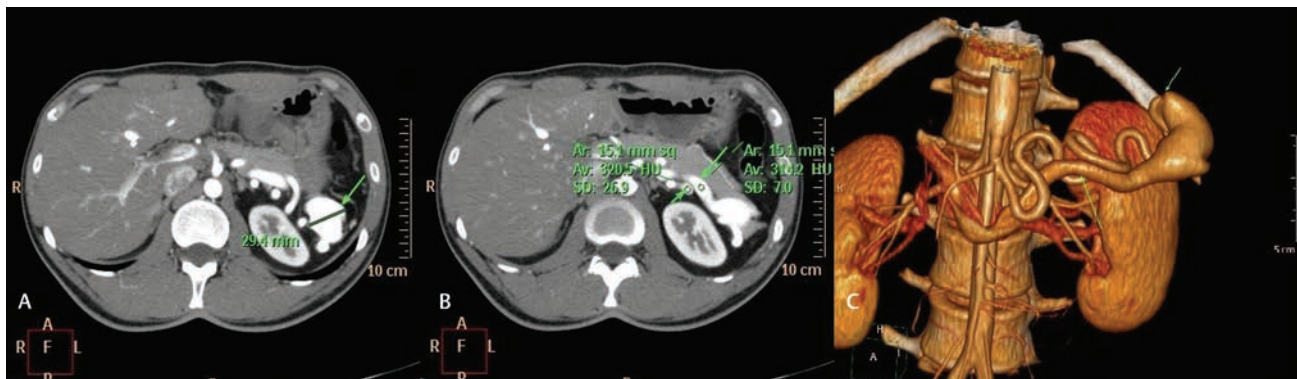


Fig. 1 (A–C) Contrast-enhanced computed tomography (CT) showed aneurysm with a maximum diameter of 30 mm on the distal part of the tortuous splenic artery and splenic arteriovenous fistula and early opacification of the splenic vein. (C) Three-dimensional CT reconstruction revealed aneurysm and connection between the splenic artery and vein. A, anterior; Av, average; F, front; L, left; P, posterior; R, right; SD, standard deviation.

published online
April 17, 2021

DOI <https://doi.org/10.1055/s-0041-1726656>
ISSN 2581-9933

© 2021. Association for Helping Neurosurgical Sick People.

This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial-License, permitting copying and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (<https://creativecommons.org/licenses/by-nc-nd/4.0/>).

Thieme Medical and Scientific Publishers Pvt. Ltd. A-12, 2nd Floor, Sector 2, Noida-201301 UP, India

arteriogram are valuable for diagnosis. Conventionally, splenic pseudoaneurysm was managed by surgery, but endovascular approach became the mainstay treatment in recent years.^{2,3} As a conclusion, diagnosis and treatment of splenic pseudoaneurysm and arteriovenous fistula are crucial to avoid associated fatal risks.

Conflict of Interest

None declared.

References

- 1 Gartside R, Gamelli RL. Splenic arteriovenous fistula. *J Trauma* 1987;27(6):671–673
- 2 McDermott VG, Shlansky-Goldberg R, Cope C. Endovascular management of splenic artery aneurysms and pseudoaneurysms. *Cardiovasc Intervent Radiol* 1994;17(4):179–184
- 3 Guillon R, Garcier JM, Abergel A, et al. Management of splenic artery aneurysms and false aneurysms with endovascular treatment in 12 patients. *Cardiovasc Intervent Radiol* 2003;26(3):256–260