Splenic Arteriovenous Fistula with Pseudoaneurysm

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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.

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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

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