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Embolization of a Pancreaticoduodenal Pseudoaneurysm Associated With Median Arcuate Ligament Syndrome

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CASE PRESENTATION

A 45-year-old woman with no significant medical history presented to our institution with acute upper abdominal pain. On the initial presentation, her hemoglobin level was 7.5 g/dL.

Contrast-enhanced multidetector CT was performed (Figure 1). In the arterial phase, a 3-mm pseudoaneurysm of the inferior pancreaticoduodenal artery was detected, as well as stenosis at the point where the aorta leads into the celiac artery.

PROCEDURE DESCRIPTION

The patient was transferred to the angiography suite for coil embolization; emergency angiography confirmed the presence of the pseudoaneurysm (Figure 2).

Selective arterial embolization via a femoral approach was performed to treat the vascular lesion. The inferior pancreaticoduodenal artery was embolized with a 2- X 20-mm Interlock™-18 Fibered IDC Occlusion System through the superior mesenteric artery.

Digital subtraction angiography demonstrated incomplete occlusion of the pseudoaneurysm due to a retrograde flow to the celiac axis, by thin and twisting arterial branches (Figure 3). Then, double catheterization of the pseudoaneurysm, from both the cranial access (gastroduodenal artery and superior pancreaticoduodenal artery) and the caudal access (inferior pancreaticoduodenal artery) was performed using a 2.4-F torqueable Bern-shape Direxion™ Microcatheter.

Finally, a coil embolization of all the inflow vessels was achieved using the Interlock™ Fibered IDC Occlusion System.

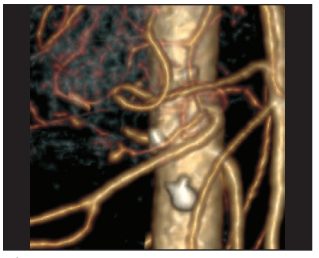

Figure 1.

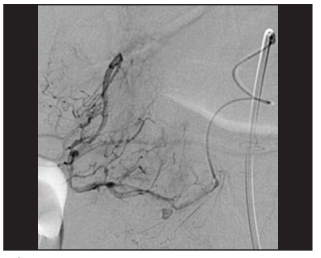

Figure 2.

Figure 3.

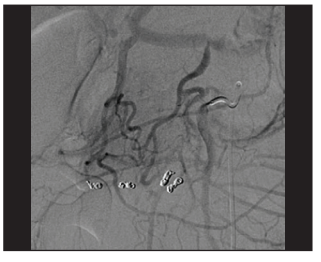

Figure 4.

FOLLOW-UP AND DISCUSSION

Final angiography demonstrated complete devascularization of the pseudoaneurysm (Figure 4). With the agreement of the vascular surgeons it was decided to surgically treat the celiac artery stenosis. The primary objective was to reduce the arterial inflow to the pancreaticoduodenal arch. Thanks to the trackability and flexibility of the torqueable Bern-shape Direxion, we could catheterize these tortuous and small arterial vessels. ■

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