

Case 437

4. Celiac artery dissection

【Progress】

He was transported to the central hub hospital where he could get the service of interventional radiology in case of emergency.

【Discussion】

Mesentery present in abdomen plays a role of carrying vessels of artery, portal vein, and lymphatics. Then, when vessel injury occurs, hemorrhages can appear in the mesentery. The mesentery surrounding stomach includes greater and lesser omentum. Gastrophrenic mesentery and gastrosplenic mesentery are included in greater omentum, as they are continuous. In our case, soft tissue infiltration in the gastrophrenic mesentery and gastrosplenic mesentery were found, indicating hemorrhage from the vessels in the mesentery or inflammation to mesentery due to perforation from stomach or transverse colon. Continuous intraluminal stenosis from celiac artery was extended axis to common hepatic artery and then, to splenic artery due to celiac artery dissection demonstrated on arterial phase of contrast-enhanced CT.

As risk factors of celiac artery dissection, they are listed as hypertension, trauma, pregnancy, connective tissue disorders, atherosclerotic vascular disease, fibromuscular dysplasia, and cystic medial necrosis (1-3). In our case, he had hypertension. The therapeutic intervention was only served in situations of persistent severe abdominal pain, cardiac shock based on the patient's pulse and blood pressure, and the associated complication with end-organ dysfunction (4-7). Most celiac artery dissection naturally closes, inducing symptoms free after a while. It is very rare to require the necessity of treatment.

In our case, the suspicious hemorrhage to gastro-phrenic mesentery and gastro-splenic mesentery was found on non-enhanced CT. The symptom of epigastralgia was getting relieved. Neither expansion of the hemorrhagic lesion nor extravasation of contrast medium, was confirmed on contrast-enhanced CT. For his safety, he was transported to the central hospital where he could get more intensive treatment including interventional radiology such as stent placement.

【Summary】

We presented a fifty-one-year-old male with the sudden pain at the epigastric region. The soft tissue attenuation with infiltrative opacity at gastro-phrenic mesentery and gastro-splenic mesentery was found on non-enhanced CT, and celiac artery dissection from celiac axis to splenic artery and from celiac artery to common hepatic artery was found on contrast-enhanced CT. He was under watchful observation without getting treatment service.

【References】

1. The American Journal of Emergency Medicine Volume 38, Issue 7, July 2020, Pages 1545.e3-1545.e5
2. Jessica R. Hoglund, et al. Spontaneous celiac artery dissection. The American Journal of Emergency Medicine Volume 38, Issue 7, July 2020, Pages 1545.e3-1545.e5
3. Mauricio Gonzalez-Urquijo Visceral and Renal Vascular Disease Volume 102p 1-8May 2024
4. Interventional treatment of isolated dissection of the celiac artery: a case report and literature review. Wang HT, Yu ZH, Tu C, Lu B. Medicine. 2018;97:0. : 10.1097/MD.00000000000011026.
5. Fenoglio L, et al. Spontaneous dissection of the celiac artery: a pitfall in the diagnosis of acute abdominal pain. Presentation of two cases. Dig Dis Sci. 2004;49(7–8):1223–7. doi: 10.1023/b:ddas.0000037816.57229.6f. [DOI] [PubMed] [Google Scholar]
6. D'Ambrosio N, et al. Spontaneous isolated dissection of the celiac artery: CT findings in adults. AJR Am J Roentgenol. 2007;188(6):W506–11. doi: 10.2214/AJR.06.0315. [DOI] [PubMed] [Google Scholar]
7. Glehen O, et al. Spontaneous dissection of the celiac artery. Ann Vasc Surg. 2001;15(6):687–92. doi: 10.1007/s10016-001-0012-0. [DOI] [PubMed] [Google Scholar]
8. Matsuo R, et al. Isolated dissection of the celiac artery--a case report. Angiology. 2000;51(7):603–7. doi: 10.1177/000331970005100710. [DOI] [PubMed] [Google Scholar]

back

2026.6.19