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Superior Mesenteric Artery Syndrome in a Young Woman

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Received Date: 10-05-2021, Accepted Date: 26-05-2021, Published Date: 02-06-2021

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Editorial

A 33-year-old woman presented with 1-month history of progressively worsening epigastric discomfort, post-prandial nausea, and vomiting. She had no documented medical history. Abdominal examination showed only mild epigastric tenderness. Abdominal computed tomography was performed and revealed compression in the third portion of the duodenum between the superior mesenteric artery and aorta with an aortomesenteric angle of 14.7° (sagittal view; Fig. 1) and aortomesenteric distance (between the aorta and superior mesenteric artery across the third portion of the duodenum) of 5 mm (transverse view; Fig. 1). Esophagogastroduodenoscopy showed extrinsic compression in the third portion of the duodenum. Superior mesenteric artery syndrome is usually relevant with rapid weight loss and largely attributed to depletion of the mesenteric fat pad which normally serves as a cushion around the third portion of the duodenum and prevents its extrinsic compression between the superior mesenteric artery and aorta [1]. The diagnosis of superior mesenteric artery syndrome depends on computed tomography findings of an aortomesenteric angle of $<15^\circ$ (normal range, $15-60^\circ$) and aortomesenteric distance of <10 mm (normal, 10-20) [2]. Esophagogastroduodenoscopy is often performed to rule out duodenal strictures [3,4]. Symptoms often resolve with weight gain by placing a jejunostomy tube for feeding [5,6]. Surgical treatment should be considered once medical management fails [7,8]. She was discharged home with weight gain and resolution of post-prandial vomiting symptoms, as well as with outpatient follow-up.

Liu W | Volume 2, Issue 2 (2021) | JCMR-2(2)-033 | Editorial

Citation: Liu W, et al. Superior Mesenteric Artery Syndrome in a Young Woman. Jour Clin Med Res. 2021;2(2):1-3.

DOI: <http://dx.doi.org/10.46889/JCMR.2021.2204>

Figure 1: Superior mesenteric artery.

Acknowledgements

Funding: This work was supported by National Natural Science Foundation of China, China (31600134).

Conflicts of Interest

The authors have no conflicts of interest to declare.

Ethical Statement

The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. Written informed consent was obtained from the patient for publication of this “Images in Clinical Medicine”.

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