Clinical History:

A 72-year-old woman with acute upper gastrointestinal bleeding (haematemesis) and pancreatic head cancer.

Imaging Findings:

1. A single arterial trunk arising directly from the aorta bifurcates early and gives both cranially- and caudally-oriented branches.

2. One of the cranial branches follows a curved pathway running counterclockwise from the left towards the right upper quadrant (arrows in Figure 4).

Discussion:

The most prominent anomaly seen is a single arterial trunk arising directly from the aorta and bifurcating early into a cranial and a caudal branch, respectively the celiac trunk (cranially oriented) and the superior mesenteric artery (SMA) (caudally oriented). This trunk is thus a celiomesenteric trunk, an anatomic variant (incidence estimated in the 0.25-2.7% range) [1-2]. Rarely, a celiomesenteric may share a common aortic origin with a renal trunk [3].

The presence of a celiomesenteric trunk has been associated with aneurysms and with median arcuate ligament compression [2]. Thrombosis of the celiomesenteric trunk may also occur and cause severe, life-threatening intestinal ischaemia involving the liver, spleen, and from the stomach up to the transverse colon [4]. The extent and consequences of intestinal ischaemia might be mitigated depending on whether the middle colic artery is absent and thus not connected to the celiomesenteric trunk [5]. In the present case, the middle colic could be visualised on selective contrast injections of the celiomesenteric trunk branches (Figure 4).

A second anatomic variant is also present in this case (Figure 5): the left gastric artery (straight red arrow) continues counterclockwise as a replaced left hepatic artery (curved yellow arrows) (incidence: 3-11%).

Differential Diagnosis List: 1. Celiomesenteric trunk. 2. Replaced left hepatic artery.,
trunk [5], Middle mesenteric artery [6], Splenomesenteric trunk

**Final Diagnosis:** 1. Celiomesenteric trunk. 2. Replaced left hepatic artery.

**References:**

Figure 1

Description: Axial slices from abdominal CT scan examination Origin: Dept. of Diagnostic Radiology & Nuclear Medicine, University of Maryland Medical Center, Baltimore, MD, USA
**Figure 2**

**Description:** Abdominal CT scan, sagittal slices **Origin:** Dept. of Diagnostic Radiology & Nuclear Medicine, University of Maryland Medical Center, Baltimore, MD, USA
Figure 3

Description: Digital subtraction arteriogram (DSA) Origin: Dept. of Diagnostic Radiology & Nuclear Medicine, University of Maryland Medical Center, Baltimore, MD, USA
**Figure 4**

*Description:* Digital subtraction arteriogram (DSA), annotated *Origin:* Dept. of Diagnostic Radiology & Nuclear Medicine, University of Maryland Medical Center, Baltimore, MD, USA
Figure 5

**Description:** Middle colic artery **Origin:** Dept. of Diagnostic Radiology & Nuclear Medicine, University of Maryland Medical Center, Baltimore, MD, USA