An Atypical Mesenteric-Saphenous Collateral Portosystemic Pathway in a Cirrhotic Patient

Sirotik Hastada Atipik Porto-sistemik Patway: Mezenterik-Safenöz Kollateral

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We defined an atypical portosystemic collateral pathway in a 63-year-old patient with cirrhosis who underwent a prior surgery for rectal carcinoma and had a right-sided stoma on the anterior abdominal wall from a prior colostomy. Abdominal Multi-Detector Computed Tomography (MDCT) images revealed a cirrhotic liver with a contour abnormality and shrinkage at the medial portion of the left lobe and right lobe anterior segments, as well as heterogeneous internal architecture seen on Figure 1. The presence of splenomegaly, enlarged splenic and portal veins and paraesophageal, spleno-renal, spleno-retroperitoneal and paraumbilical collateral veins were also striking (Figure 1). In contrast with the classic portosystemic collateral pathways, the patient had another collateral flow between the superior mesenteric and greater saphenous veins. A branch of the superior mesenteric vein was coursing through the right anterior abdominal wall musculature and extending to the right greater saphenous vein in the subcutaneous fat tissue (Figure 2, 3). The superior mesenteric vein branch used the right-sided prior colostomy site to complete the portosystemic pathway. The right-sided inferior epigastric vein seemed normal in caliber and course.

In portal hypertension, some blood in the portal venous system may reverse direction and pass through the portosystemic anastomoses into the systemic venous system. As a

Figure 1. A thick section MIP image shows the collateral vein passing through the anterior abdominal musculature to the subcutaneous fat tissue (arrow).

Figure 2. An axial image at the portal venous phase shows the esophageal (short arrow) and paraesophageal varices (arrow). A cirrhotic liver with surface nodularity is also shown.
result, a variety of major hepatofugal collateral pathways can develop in patients with portal hypertension. The portosystemic collateral vessels are the esophageal, paraesophageal, splenic, splenorenal, mesenteric, short gastric, retroperitoneal and paraumbilical veins as well as the mesenteric-saphenous collateral (1).

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**References**


*Figure 3.* A multiplanar reformatted image of the collateral vein between the superior mesenteric vein branch and greater saphenous vein coursing through the subcutaneous fat tissue of the anterior abdominal wall (arrows).