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INTESTINAL ISCHEMIA

■ INCIDENCE AND EPIDEMIOLOGY

Intestinal ischemia occurs when splanchnic perfusion fails to meet the metabolic demands of the intestines, resulting in ischemic tissue injury. Mesenteric ischemia affects 2–3 people per 100,000, with an increasing incidence in the aging population. Mortality with acute presentation remains high, between 50 and 80%, and early diagnosis with prompt intervention is crucial in improving clinical outcomes. Intestinal ischemia is further classified as chronic mesenteric ischemia (CMI) or acute mesenteric ischemic (AMI). CMI is secondary to multiple major visceral arterio-occlusive disease, with involvement of the superior mesenteric artery (SMA) most worrisome. AMI is most commonly associated with (1) arterio-occlusive mesenteric ischemia, (2) nonocclusive mesenteric ischemia, and (3) mesenteric venous thrombosis.

CMI is the failure to achieve normal postprandial hyperemic intestinal blood flow. This occurs due to an imbalance between the supply and demand of oxygen metabolites to the intestinal tract similar to cardiac angina. CMI occurs due to significant atherosclerotic disease leading to the narrowing of the SMA and/or celiac artery origins.

AMI is the occurrence of an abrupt cessation of mesenteric blood flow, usually embolic or thrombotic in nature. Approximately 50% of AMI is due to embolus to the mid to distal SMA. Embolus etiology includes atrial fibrillation, recent myocardial infarction, soft atherosclerotic plaque, infective endocarditis, valvular heart disease, and recent cardiac or vascular catheterization. Approximately 25–30% of cases are characterized by an acute-on-chronic thrombosis in patients with preexisting mesenteric atherosclerosis. Thrombotic