



## Intestinal Ischemia

Intestinal ischemia describes a group of disorders that are due to an insufficient blood supply to a portion of the GI tract. The type and prognosis of ischemic injury depends on the cause, the blood vessel(s) involved, and the patient's overall medical condition.

The most common form of ischemia is colon ischemia (ischemic colitis). The symptoms usually include left lower abdominal pain, an urge to defecate and followed by bright red or maroon stool within 24 hours. Most patients do well, but some can develop chronic ischemic colitis or a stricture (narrowing) or gangrene.

Small intestinal ischemia can present acutely presenting with sudden abdominal pain and swelling. A slower, more chronic course is preceded by weeks to months of abdominal pain after meals, weight loss and diarrhea.

Intestinal ischemia can be caused by a clot, in patients with underlying cardiac problems such as heart failure, irregular heart beat, or a heart attack.

In **acute small intestinal ischemia**, initial management of the patient includes treating the underlying medical conditions, intravenous or "IV" fluids, and possibly antibiotics. Angiography (a procedure performed to view blood vessels after injecting them with a dye) is considered the gold standard for diagnosis and is usually performed after a CT scan has shown that the abdominal pain is not caused by any other disorder. A treatment decision is made based largely upon the findings on angiography and the assessment of the patient's clinical status. If a significant embolus or thrombus is found in a vessel and the patient appears quite ill, a laparotomy (open abdominal surgery) generally is recommended either to remove the obstruction in the artery or vein or create a bypass route for blood around the blockage. If, at the time of surgery, the surgeon finds parts of the intestine that are infarcted (dead), that portion of bowel is resected (removed), and the portions of the intestine above it and below are reconnected.

In cases of **non-occlusive intestinal** ischemia, there is no identifiable point of blockage seen by angiography. Thus, the blockage is caused by diffuse spasm in the blood vessels supplying the intestines and the spasm is precipitated by underlying medical conditions such as heart failure; these underlying conditions must be addressed to help restore blood delivery to the intestines.

In **colon ischemia**, the extent and severity of the injury varies. If the patient is stable, colonoscopy is usually performed within 24-48 hours of the onset of symptoms. In most cases, symptoms stabilize within 1 to 2 days and the injury to the colon can resolve in 1 to 2 weeks. A minority of patients develop more significant consequences and are treated possibly with surgery

Intestinal ischemia can be a devastating disease. There has been extraordinary progress, however, in medical understanding of intestinal ischemia; a growing number of physicians now recognize and diagnose intestinal ischemia early, thereby improving the outcomes for their patients. Current management of intestinal ischemia has evolved from simply managing the grave consequences after an acute event to more aggressive and proactive methods aimed toward recognizing and exploring early warning signs and preventing potentially catastrophic complications.