

Volvulus Characteristics and Presentation

Volvulus is a form of bowel torsion that occurs when a portion of intestine becomes twisted around its mesentery. If vascular supply or outflow is compromised, it can lead to bowel infarction. The most common sites of volvulus are the sigmoid colon and cecum. Clinical features are similar to those of small bowel obstruction including abdominal pain. Patients with severe or ruptured volvulus can present with unstable vital signs or peritonitis.



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Characteristics

Bowel Torsion

[Bowel-bowl Twisting](#)

Volvulus is a form of bowel obstruction that results from a loop of intestine twisting around itself and the mesentery that supports it. This is also known as bowel torsion. It can lead to intestinal obstruction or even destruction of the affected section (intestinal gangrene). Causes of this disease include mobile mesenteric suspension, intestinal malrotation, an enlarged colon, Hirschsprung disease or an obstructing mass.

Bowel Infarction

[Bowel-bowl Infaction-Fart](#)

Protracted volvulus can lead to infarction, or loss of blood flow to the affected portion of the intestine. This is a severe complication. In this situation there may be fever or significant pain when the abdomen is touched. If not treated, bowel infarction can lead to necrosis and systemic complications.

Sigmoid Colon and Cecum

[S-mud and Sack-coins](#)

The most commonly affected areas are the sigmoid colon and the cecum. Sigmoid volvulus occurs in 65% of cases and cecal volvulus in 33% of cases.

Clinical Features

Small Bowel Obstruction

[Small Bowel-bowl Obstructed](#)

The clinical features of volvulus are similar to those of small bowel obstruction (SBO). In a small bowel obstruction, pressure can build up behind the obstruction. This is responsible for many symptoms like abdominal distention, nausea, vomiting, and pain.

Abdominal Pain

[Abdominal Pain-bolt](#)

In a clinical setting patients with suspected volvulus can present with abdominal pain, bloating, vomiting, constipation and bloody stool. The abdominal pain may be waxing and waning if it follows peristaltic contractions.

Unstable Vital Signs

[Unstable Vital-ground](#)

Patients with volvulus usually have a low-grade fever, and tachycardia with regular pulse. Tachypnea and low blood pressure with a narrow pulse pressure can be seen in hypovolemic shock due to bowel perforation. Patients often appear in distress.

Peritonitis

[Parrot-toe-on-fire](#)

Patients with volvulus can present with signs and symptoms of peritonitis (e.g. rebound tenderness, guarding) if bowel perforation has occurred. A ruptured volvulus is especially dangerous as patients can rapidly decompensate.