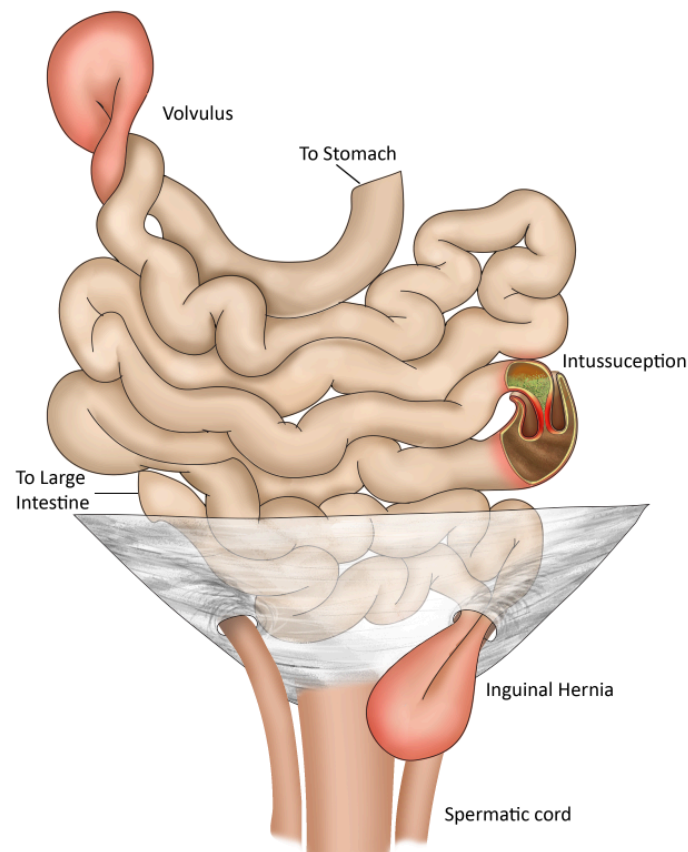


8.2.2

Intestinal Obstruction

Watch the video [Mechanical Bowel Obstruction](#)

Intestinal obstruction refers to anything that blocks the movement of intestinal contents on their way towards the anus. This obstruction can cause a lot of pain as the area proximal to the obstruction accumulates fluid and gasses that put pressure on the intestinal walls, causing distention. The gasses that begin to accumulate are mainly composed of swallowed air or nitrogen (because it is poorly absorbed in the intestinal lumen). Increased pressure on the intestinal wall will interrupt blood flow and possibly lead to gangrenous changes that increase the risk for bowel wall perforation. A perforated bowel is a life-threatening condition because the peritoneal cavity is exposed to the bacteria of the gut and a serious infection can develop.



Types of Intestinal Obstruction Image by Becky T F19

There are several common causes for intestinal obstruction:

- **Intussusception** occurs when the intestinal wall folds in such a way that the intestine “telescopes” and a section of the bowel folds into the section immediately ahead of it. Intussusception is an emergency requiring rapid attention to avoid bowel necrosis. If intussusception is not treated, the telescoping of the bowel can cut off some of the blood supply to the bowel wall and lead to ischemia of the intestinal mucosa. This ischemic mucosa can slough off and produce what’s called a “currant jelly stool.” This is a mixture of sloughed off mucosa, blood, and mucus. Intussusception is more common in children (especially young boys) than adults. When intussusception happens in children, the cause is generally unknown. Although the benefits of getting the rotavirus vaccine as a child heavily outweigh the cons, the rotavirus vaccine has been correlated with intussusception in some studies. Risk factors for adults developing intussusception include bowel adhesions and intestinal tumors. The treatment for intussusception in children is usually an enema, which is using air or a liquid to create pressure within the intestine and “un-telescope” the intussusception. If enema fails, surgery is performed. In adults, treatment generally involves surgery and likely a resection of a portion of the bowel.
- A **volvulus** occurs when part of the intestine twists over on itself like a kink in a garden hose. A volvulus is most often due to a birth defect, but can also develop in older adults with constipation. It is more common in older men. Surgery is required to correct the volvulus and remove any possible dead tissue.
- **Inguinal hernias** are a bulging of the intestines through a weak spot in the abdominal wall muscles or the inguinal ligament. The most common site of a hernia is found at either of two passages called the inguinal canals that penetrate the lower abdominal wall on each side of the groin. Inguinal hernias are far more common in men because the protruding bowel segments can follow the spermatic cord which also perforates the abdominal wall. In extreme cases, bowel segments can fold down into the scrotum.



This content is provided to you freely by BYU-I Books.

Access it online or download it at

https://books.byui.edu/bio_381_pathophysiol/822_intestinal_obst.