Causes of colic that requires surgery

Colon torsion or "twisted gut" is one of the most common, and most dramatic, types of surgical colics. The large colon is separated into sections folded into left and right, upper and lower quadrants. The left quadrants are not attached to the body wall; these parts of the large colon are free moving in the abdomen and can twist 180 to 360 degrees causing a complete blockage. Not only is gas and food material trapped inside the twisted gut, but blood supply is cut off, causing damage or death to the intestine. As the gut dies, toxins are released into the body, causing severe illness or even death. For some horses, pain medication helps keep them quiet for approximately an hour. But some horses are so painful that the drugs seem to help very little.

Strangulating lipomas and epiploic foramen entrapment are situations where blood supply to the small intestine is completely cut off and the intestine dies. When a lipoma (fatty tumor) develops, it is connected to the intestines by a thin strand of tissue. This strand of tissue acts like a string and the lipoma acts like a weight, wrapping around a section of small intestine then tightening and cutting off the intestine completely.

Epiploic foramen entrapments occur when a section of small intestine falls into the epiploic foramen—a triangular window created by the body wall, the liver and the vena cava (large abdominal vein carrying blood back to the heart). The trapped small intestine gets irritated from the partial obstruction and swells, getting heavier and pulling more intestine through the window, eventually causing complete strangulation of the small intestine.

These types of colic are very painful; the intestines die from lack of blood supply and toxins are released into the body. Horses with these types of colic are very sick. Often it's difficult to get them to stay up, and they are minimally responsive to pain medications.

Enteroliths, commonly called intestinal stones, can cause colic and need to be removed surgically. These stones develop inside the large intestine and can get so big that they either irritate the colon or get stuck within the colon, potentially cutting off circulation to the intestine. Without proper circulation, the area of intestine around the stone dies and then ruptures, releasing intestinal contents into the abdomen and massive amounts of toxins into the body, which causes death.