ENTEROTOMY

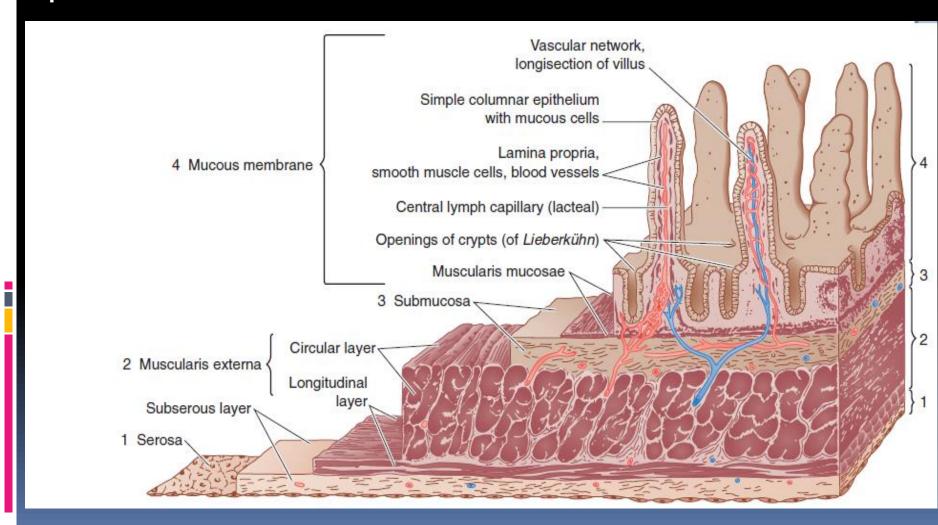
Assis. Lec. Mohammed Resen

Anatomy of the intestine

- The small intestine is composed of the duodenum, jejunum, and ileum. Which extends from the pylorus to the ileocolic
- Large intestine is compose of Colon, cecum, and rectum
- □ Normal gut motility involves two types of contraction: segmental contraction to mix the ingesta and peristaltic contractions to move it.

The small intestine is structurally composed of:

- 1-Mucosa.
- 2-Submucosa.
- 3-Muscularis.
- 4-Serosa.

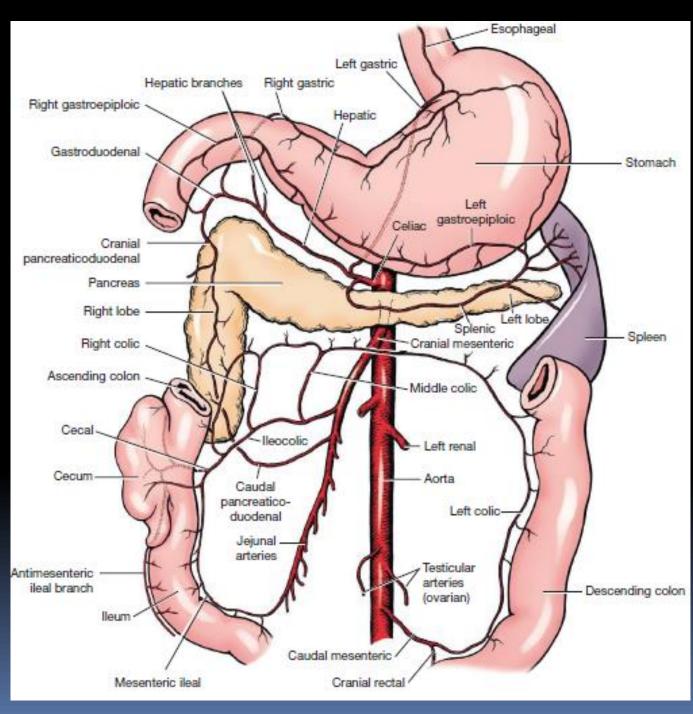


The intestinal blood supply:

- 1-Cranial mesenteric artery
- 2-Celic artery (gastro duodenal A.)
- 3-Caudal mesenteric artery along the descending colon.

The nerve supply:

Autonomic nervous system(vagus and splanchnic nerves).



Enterotomy

Enterotomy: it is a surgical incision created in the intestines. If there is some sort of foreign body in the intestines, or a biopsy in needed

Indications of Enterotomy:

- 1- Intestinal obstruction by Foreign body (e.g. pieces of bone, litter, parasitic infestation, gallstone, hairball pass from stomach to intestine by use mineral oils).
- 2-Intestinal Biopsy



Preoperative Care

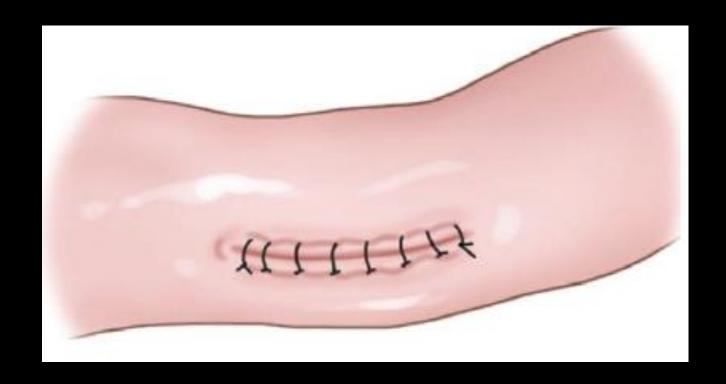
- Fasting the animal
- Fluid Therapy: All animals undergoing surgery are at risk for fluid and electrolyte imbalances; however, animals with gastrointestinal disease often present with preexisting imbalances that must be corrected before surgery.
- Antibiotic Prophylaxis: The small intestine of dogs normally contains gram-positive and gram-negative organisms.

Surgical Procedure

- Prepare the animal
- Incision in the linea alba
- The segment of intestine to be removed is isolated from the remaining viscera and the peritoneal cavity with moistened laparotomy sponges.
- Intestinal contents are milked away from the proposed sites and kept in place by noncrushing forceps (Doyen Intestinal F.) or an assistant's fingers. The lumen on each side of the segment is obstructed at least 1.5 cm from the proposed sites.

Cont.

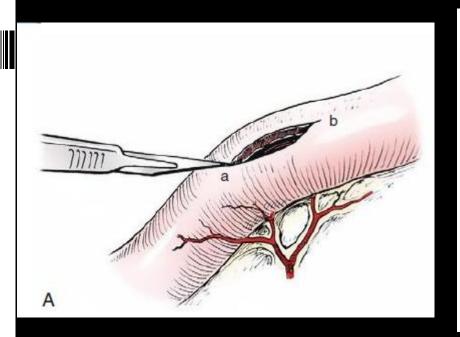
- A longitudinal incision is made in the antimesenteric border of the bowel immediately distal to the foreign object. This ensures the suture line is placed in healthy bowel that has not undergone pressure necrosis or distension from presence of the foreign body.
- The enterotomy is closed longitudinally in a single layer, appositional pattern with simple interrupted or continuous sutures.

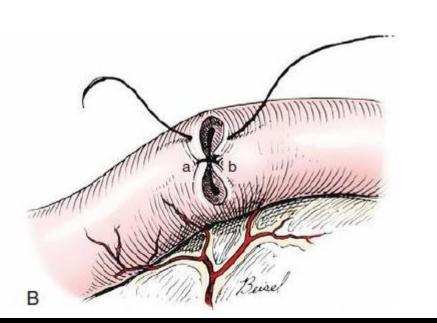


Appositional pattern with simple interrupted

Cont.

- When full-thickness intestinal biopsies are needed for histopathologic evaluation, a longitudinal elliptical incision is made in the anti mesenteric border of the bowel. If longitudinal closure of the defect compromises the lumen, the defect is closed transversely in a single layer, appositional, simple interrupted pattern.
- This can cause significant bending of the bowel at the suture line, but adverse clinical effects are not reported





Enteric biopsy. A, A longitudinal elliptical sample of tissue is removed from the antimesenteric border.

B, The defect is closed in a transverse orientation to prevent luminal compromise.

- The linea alba closed by absorbable suture by continuous pattern
- The skin incisions closed traditionally

Postoperative care

- 1. Antibiotics are given after surgery
- 2. Pain medication is usually needed for 2 days
- 3. All laxatives are usually stopped
- 4. Watch for signs of infection such as increased redness, swelling or discharge.
- 5. Limit exercise for 3 weeks
- 6. Suture removal 10-12 days after surgery.

POSTOPERATIVE COMPLICATIONS

- Septic Peritonitis
- Adhesions
- Ileus: Paralytic ileus is common complication following intestinal surgery

To minimize these complications:

- 1. Minimal trauma.
- 2. Fast surgery.
- 3. Aseptic technique.
- 4. Avoidance of irritation to the peritoneal cavity

Thanks for Listen