**Presentation:**

**Classic case:**
BIG breed dog, bloated & retching- trying to throw up, but nothing comes out

Signs vary, depending on degree of rotation, 2ndary shock, & toxemia
- Vomiting, retching, salivation, abdominal distention
- Tympany, pain, stands stretched out;
- Eventually weakness/collapse, shock
- Usually older, deep chested, large/giant breed dogs

**Risk factors:**
- **Big breed**
  - Great Dane, Weimaraner, St. Bernard, std Poodle
  - Gordon/Irish setters, Old Eng Sheepdog
- **Nutrition/management:**
  - Once a day feeding, elevated bowls
  - Eating very fast or large volume of water or food
  - Exercise after eating
  - Dry food with oil/fat a main ingredient
- **Other**
  - Narrow, deep-chested conformation
  - Underweight
  - Fearful temperament, stress
  - Increased incidence Nov-Jan (US)

**Differential DX:**
Bloat, SI volvulus, splenic torsion, diaphragmatic hernia w/stomach in chest

**Test of Choice:**
Physical exam & Radiographs (double-bubble, “popeye” or C-sign)
Rx of Choice:

1.) Immediate shock therapy - FIRST Give IV fluids BEFORE or during diagnostics
   - Multiple IV fluids access, Ig volume crystalloids &/or hypertonic saline, &/or colloid
   - Pass orogastric tube CAREFULLY, decompress if possible this way
   - Trocarize stomach in extreme cases

2.) Surgical correction - derotate, gastropexy, +/- splenectomy.

3.) Medical therapy must address:
   - Hydration
   - Blood pressure
   - Electrolytes
   - Acidosis
   - Cardiac arrhythmias; Usually ventricular- Lidocaine continuous rate infusion (CRI)

4.) Post-op care IS critical – Complications are MANY and SERIOUS!!
   - Electrolyte imbalances: K+, Mg+ increase risk of arrhythmias
   - Splenic torsion, reperfusion injury
   - Esophagitis, gastric ulcers
   - Aspiration pneumonia, acidosis
   - Ileus, peritonitis
   - DIC

Prevention:
   - Feeding management
     - Small, low fat meals
     - Minimize exercise after meals
     - Minimize water after exercise
   - Prophylactic gastropexy in appropriate breeds
   - Do NOT breed dogs that have had GDV
   - Do NOT breed dogs w/ relative w/ hx of GDV
Prognosis: DEPENDS.....
Depends on degree of ischemic damage & complications post-op.

- 15% mortality in Sx patients
- ↑s to 30% with gastric necrosis
- Arrhythmias do NOT affect mortality

Mortality rates INcrease with
- High lactate
- Delay of 5 hrs or more to admission
- Hypothermia at admission
- Hypotension anytime

PEARLS: LIFE-THREATENING EMERGENCY. Restore blood flow ASAP

- Give IV fluids BEFORE or simultaneous w/ diagnostics
  - Have anesthesia/surgery ready.
- Successful passage of orogastric tube DOES NOT rule out presence of GDV
- Classic signs on Rads not always present.
- Expect cardiac arrhythmias
- Post op therapy just as important as preoperative and surgical Tx.

Refs: Cote’s Clin Vet Advisor-Dog and Cat 2nd ed., pp. 436-8, Bonagura, Twedt’s, Kirk’s Current Vet Therapy XIV, pp. 77-82, Pasquini, Guide to Sm An Clinics, 3rd ed. p 45, Merck Vet Manual online, Gastric dilatation volvulus, DV radiograph, ECG images courtesy, Dr. Jennifer Adams, Lat. radiograph images courtesy, Dr. Joel Mills