

PERINEAL HERNIA:**Tenesmus with a dynamic bulge****Synopsis-- Anatomy and the Disease**

The pelvic diaphragm is comprised of several structures that can weaken over time in some patients—usually older intact male dogs—levator ani and coccygeus muscles, sacrotuberus ligament and peritoneum. Which comes first, a weak pelvic diaphragm (the chicken) or straining against an enlarged prostate (the egg), we don't know. What we see is progressively non-productive tenesmus with varying degrees of visible bulging in the perineum. Contents being pushed caudally can include periprostatic fat, omentum, prostate, bladder, small bowel, and rectal wall/sacculations. If a bladder retroverts into the perineal hernia, urethral obstruction can result and make a quasi-elective corrective surgery more urgent. Castration of intact male dogs is strongly recommended, given a recurrence rate 2.7x higher for intact dogs.

The location of the defect (caudal, dorsal and/or ventral), the health of the associated tissues, and the amount of herniated contents/organs will dictate both repair options and prognosis.

Surgical Overview:

The workhorse in the corrective options is the Internal Obturator Transposition. In this procedure, the internal obturator muscle is used as a “wall” of tissue to close off the weakened path through the pelvic diaphragm. A variable degree of anatomic reapposition is employed as well. Rarely, other nearby soft tissues or permanent or absorbable patches are recruited to augment tenuous repairs with friable tissues.

Colopexy and ductus deferens -pexy may be used in severe or recurrent cases of rectal prolapse and bladder retroversion, respectively.

The **indications & rationale** for surgical treatment are:

- Early repair carries a better prognosis for successful and long-lasting repair.
- Herniation of bladder and/or small bowel can quickly become medical emergencies. Cystocentesis of a herniated bladder and manual manipulations to reposition bladder/small bowel should be aggressively pursued.
- Unilateral treatment (and castration) may be protective against ongoing tenesmus that weakens/herniates the opposite side.

Other options for treatment (besides surgery) are:

- Aggressive bowel health and physiotherapy may slow progression of early pelvic diaphragm weakness; this includes high (*insoluble*) fiber diet supplement (for optimal stool character; i.e. big/bulky, well formed), weight loss, prebiotic (*soluble* fiber) and probiotic supplements (for optimal colonic health) and increased activity/exercise to promote muscle development and regular bowel movements.
- Early/pre-emptive castration of geriatric dogs.

Supportive/ancillary options with surgical treatment are:

- Castration of intact male dogs has been shown to be close to essential for a successful, non-recurrent outcome. Tenesmus associated with prostatic hypertrophy is counterproductive.
- Adding insoluble fiber to diet will create bulky, easy to pass stool with less straining. (Best options include wheat or oat bran added to food and adjusted to achieve optimal stool character; lifelong use essential. Other medical fiber types (psyllium and polyethylene glycol) tend to make stool more gelatinous and clingy.)

- Prebiotic (soluble fiber) and probiotic supplements (for optimal long-term colonic health)
- Increased activity/exercise to promote muscle development and regular bowel movements.

The **perioperative experience** for pet and owner includes:

- Close monitoring of patient preop to catch emergent developments (bladder/small bowel herniation).
- Dietary modifications and trials will be necessary preop and postop.
- Attention to perineal hygiene (butt baths and cleanups) and acceptance of accidents in the house for a few weeks or so.
- Close monitoring postop for stool character, incisional infections, tenesmus and recurrence.

Expectations for outcome are:

- When performed early in the course of disease, outcome is much better (healthier tissues, less volume herniated.)
- Failure to maintain life-long stool accommodations will increase failure, recurrence, or 2nd side development.

Complications that may arise with this procedure are:

- Fecal incontinence (rare; if seen, manifests as dropping a “pellet” of stool occasionally)
- Tenesmus (usually temporary, if stool character is managed well)
- Rectal prolapse (secondary to ongoing tenesmus, pain)
- Stranguria (if/when urinary bladder involved)
- Superficial or deep surgical infection (rare, requiring long course Abx)
- Muscle flap dehiscence/failure

What a surgeon needs prior to surgery:

- Dietary modifications discussed and implemented, pending surgery
- Characterization of herniated contents (bladder being most pertinent to surgical planning)
- Bilateral vs. unilateral exam finding on palpation, and owner prepared for plan adjustment based on palpation under anesthesia.

General considerations and complications for all surgery/anesthesia procedures are:

- *Difficult and/or painful anesthetic recovery (variable; may require additional medications or re-hospitalization)*
- *Incisional infections (rare, minor; usually require oral antibiotics)*
- *Incisional dehiscence (rare, minor or major; may require surgical revision)*
- *Adverse anesthetic event (rare, major; may result in serious impairment or death)*

Proper owner expectations are important to a successful experience and patient outcomes. Please discuss this information with your clients while assisting them with decision-making for **Perineal Hernia**.

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