

"Princess of Posterior Problems"

Perineal hernia
 Apocrine Gland Adenocarcinoma of the Anal Sac
 Perianal Adenocarcinoma
 Perianal Adenocarcinoma







Physical exam findings

- Overweight. BCS 6/9
 Dental tartar and gingivitis
 Bilaterial medial patellar luxations (1/4)
 Swelling and bruising associated with the right side of the anus. Scrotal edema
 5x4cm firm, fixed, mass affect associated with the right side of the perineum



Rectal exam- bilateral perineal hernias, right larger than the left. Prostatomegaly, smooth and symmetric

Differential Diagnosis

- Perineal hernia
 AGASACA





Minimum Data Base

- CBC- stress leukogram
- Serum chemistry- BUN 35, Crea 1.9, albumin 3.5
- PT/PTT- within normal limits
- UA via catheterization- occasional cocci, 1+ WBC, 2+ RBC
- Lactate-2mmol/L

Diagnostics

- Physical exam, rectal
- Fine needle aspirate with cytology, Creatinine
- Following confirmation- staging
- CBC, serum chemistry, UA
- Abdominal radiographs, +/- contrast urethrogram
- Abdominal ultrasound
- Computed tomograph



Perineal hernia

 Most common location: the levator ani, internal obturator, and EAS muscle
 Clinical signs – usually due to stool retention, organ entragment
 Unilateral (47% to 56%) or bilateral, with the right side being more commonly affected in unilateral disease (59% to 84%).

Bladder retroflexion has been reported in 20% to 29% of patients





Surgery

- When? Perineal hernias are typically not emergencies with one exception
 Herniation of the bladder or small intestines into the perineal space
- Discuss with owners the possibility of bladder herniation, if noted, seek emergency support
 What if the bladder is herniated?
 Attempt to pass a uniany catheter, once the bladder is smaller if an operative to retrollex it back into the abdomen. Leave uniany catheter in place.
 Unestite backers and the uniany catheter is placed by the placed of the abdoment.
- If unable to place catheter, perform cystocentesis and attempt to reduce the bladder, may be able to then place urinary catheter. Laceration of the bladder is a concern



Interesting facts

- · Perineal hernias- dogs, cats, cows, elephants, and sheep Premiera refinites y ougs, cats, cows, elephanits, and sineep Occurs in dogs romanly in older intact males (>85% of all cases). Average age 7-13 years (9 years peak).
 Breed predilection-Boston territes, Pekingese, Corgis, Boxers, Poolles, OED, Bouvier, Dachshunds, GSD, mix breeds
- Possible risk factors- short/docked tails, rectal abnormalities, enlarged prostate, prostatic cysts, hormonal changes, colorectal disease, cystitis, anal sacculitis (persistent straining)
- Relaxin- produced by prostate, leading to cyst development and weaking of the pelvic diaphragm.
 29-60% hernia dogs have prostatic disease











- Five techniques for repair
 Primary apposition
- Internal obturator
- Semitendinosus transpos
- Fascia lata graft
- Use of the tunica vaginalis



Surgery (Continued)

- Additional surgical intervention that may be required
- Augmentation with mesh/bioimpla
- Castration (can be performed with a caudal of the cauda
- Ductus deferopexy (in some cases of bladder herniation)
- Colopexy (in cases of recurrent rectal prolapse)

Cystopexy

.............................

Internal Obturator flap

over dorsum





.......................



Anesthesia considerations

- · Ventilate obese patients
- Consider sacrococcygeal epidural (0.05mg/kg morphine: 0.13mg/kg bupivacaine)
 https://vetgiriontherun.com/coccygeal-block-feline-urethral-obstruction-vetgiri-veterinary-ce-video-blog/ Perioperative antibiotics- ampicillin, cefazolin, cefoxitin
- No rectal temperatures postop
- Discharge medications- NSAID, tramadol, stool softener (lactulose, DSS), amoxicillin

Grafts

- Fascia lata graft
- Autogenous tissues, complete incorporation into the surgical site
- No dogs had recurrence at 6 months
- Vet Surg 2005, A. Bongartz et al.
- Polyprolene mesh-primary or augmentation of muscle flap. Used when primary herniorrhaphy has failed.
- Tunica vaginalis obtained from castration at time of surgery
- Used as a primary closure. No hernial recurrences 11-17month follow up
- Veterinary and Animal Science June 2020, S. Guerios et al.



Colopexy/ cystopexy

- Goals- maintain bladder and colon in intra-abdominal position
- Colon is pexied on the left and bladder on the right via abdominal approach
- 3-0 pds or prolene continuous or interrupted pattern. Does not penetrate lumen. Creates adhesion between organ and body wall



Complications

- Wound infection

- Incontinence-10 to 15%, more common with single session bilateral repairs
 Sciatic entrapment <5%. latrogenic secondary to sutures placed within sacrotuberous ligament
- Recurrence with internal obturator flap directly correlates to lack of experience of the surgeon
- Failure to castrate can increase risk
 of recurrence
- 10% for experienced and up to 70% with less experienced surgeons
- 12.5% with muscle flap and mesh graft







8 yo FS Miniature Labradoodle, 19kg
Mass noted by groomer about 2 mont
No current medications
Per owner- completely asymptomatic







Physical exam findings

 Physical exam was essentially normal with exception of Integument
 Integument-2cm firm, fixed mass at the 5 o'clock position
 Rectal exam- normal left gland. Unable to identify right gland. No appreciable sublumbar node enlargement. Small prostate prostate.

Anatomy Review

Lymph drainage- medial iliac nodes

- Papilla, duct, and gland itself Papilla and ducts exit into the cutaneous zone Gland is comprised of coiled apocrine glands and fundus (sac) that stores secretions
- Blood supply- paired perineal arteries, veins, branches from caudal rectal



MacPhail,C. Compendium Surgical Views 2008; 630-635





Minimum Data Base

- CBC- within normal limits
- Serum chemistry- Ca 13
- UA- rare oxalate crystals. Quiescent sediment
- PT/PTT- within normal limits

Hypercalcemia

Paraneoplastic syndrome-pseudohyperparathyroidism 25-30% diagnosed at presentation

Parathyroid related protein (PTHrp) • Metabolically behaves as PTH



Increased Ca with decreased PTH- consistent with



malignancy PTHrp high prevalence in dogs for AGASACA than LSA

Diagnostics

 Physical exam, rectal

 Fine needle aspirate with cytology

 Following confirmation - staging

 CBC, serum chemistry, UA, PTHrp, iCa

 Abdominal radiographs

 Abdominal ultrasound

 Computed tomography









- Can place tom cat catheter into papilla to identify duct in small glands
 Curvilinear lateral incision 1 to 1 1/2cm lateral to the anal orifice
- Use curved metzenbaum scissors to dissect free from EAS, IAS, and rectum
 Resect rectal wall as needed with invasive tumors
- Double ligate duct at the papilla with monofilament absorbable suture





· Copious lavage

- Closure
- Reconstruct sphincter
- Monofilament absorpable suture)3-0 or 4-0 PDS)
- Monofilament nonabsorbable skin sutures (3-0 ethilon or an intradermal pattern with absorbable)
- Cool compresses q8h for 5 days post
- E collar in place at all times
- Restricted activity for 2 weeks





Complications

- · Persistent tenesmus
- Incisional dehiscence
- Incisional infection • Fistula formation (epithelial tissue remains)
- Anal stricture- bilateral, single session
- Fecal incontinence- EAS and/or nerve damage, longer than 4 months- permanent Tumor re-growth

Hobson et al, Vet Surg, 2006;35:267-270

Prognosis

MST- 544 days with surgery Negative prognostic indicators Masses greater than 10cm² Nonsurgical treatment only Presence of distant metastasis Presence of node metastasis

Inability to defecate or urinate



Nonneoplastic anal sac disease Common in dogs, Uncommon in cats. 3 most common diseases: impaction, sacculitis, abscessation. Variations of the same disease process. Infection inflammation and draining sinus should teated medically 1st. Inflammation makes the procedure more difficult resulting in more post op complications. Indications for excision: © Recurrent episodes of impaction © Chronic anal sacculitis/ abscessation © Failure of anal sac abscess resolution © Failure of medical therapy





Perianal gland adenocarcinoma

-can be similar in appearance to adenomas. -intact, castrated males and females. -on bormone dependency. -grow faster, fixed to underlying tissues, firmer, larger. -15% metastasis -often return after excision. -less common. -The smaller the better. 2 year tumor control great than 60% if less than 5 cm diameter. -TNA recommended.

