

PERINEAL HERNIAS

What is a perineal hernia?

Perineal hernia is a condition where the muscles in the pelvis weaken and separate allowing organs and tissues to prolapse through this new space. A swelling adjacent to the anus may occur as a result. Older intact male dogs (un-neutered) are the most commonly affected, although it can occur in any breed of dog or cat.



Figure 1: Hind end of a dog with tail raised (arrowhead) with bilateral perineal hernias (arrows) below the anus (star)

What are the clinical signs associated with perineal hernia?

Most of the time, patients are presented for straining to defecate. Another common sign is a swelling seen next to or below the anus. Hernias are unilateral 50-66% of the time

with the right side affected more often than the left. However, bilateral hernias can also occur. If there is a

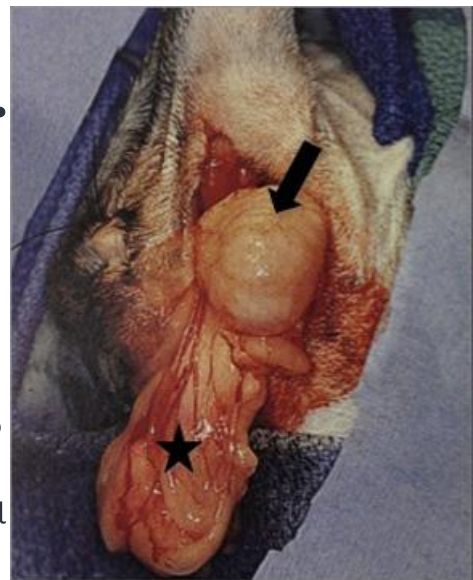


Figure 2: Intraoperative picture of a perineal hernia with a herniated urinary bladder (arrow) and pelvic fat (star)

bilateral hernia, the entire perineal area will appear swollen (Figure 1). The swelling is typically soft and fluctuant and can be reduced with manual manipulation. A perineal hernia is diagnosed with a digital rectal exam. The herniated area feels thin sometimes the defect itself can be palpated. If organs like the urinary bladder or prostate have herniated, the swelling may feel hard and the patient may not be able to urinate. These cases, unlike most perineal hernias, are surgical emergencies (Figure 2).

What causes a perineal hernia?

Weakness and separation of the components of the pelvic diaphragm musculature cause perineal herniation. While perineal hernias occur almost exclusively in older, intact male dogs, any breed can be affected, and the cause is still unclear. Many factors likely contribute to the development of a perineal hernia. Some suspected factors include structural weakness of the pelvic diaphragm, which may be

exacerbated by hormone imbalance in intact male dogs, congenital predisposition, abnormalities of the rectum, nerve damage to the muscles that make up the pelvic diaphragm, or an enlarged prostate. 25-69% of dogs with perineal hernias have concurrent prostatic disease.

How is a perineal hernia corrected?

Perineal hernias are not considered emergency cases unless the bladder has been trapped in the hernia and the patient is unable to urinate (Figure 2). Hernia repair involves reducing the hernia contents back into their normal positions followed by reconstruction of the pelvic diaphragm. There are several different methods by which the pelvic diaphragm can be reconstructed. The traditional herniorrhaphy technique (Figure 3) involves placing sutures between the external anal sphincter muscle and the remnants of the levator ani and coccygeus muscles if there is enough muscle mass remaining for repair. Another repair method is called an internal obturator muscle transposition (Figures 4 and 5). In this procedure, the internal obturator muscle (in the pelvis) is rotated upwards and sutured in place to fill the hernia defect. In some cases, surgical mesh is sutured to the muscles to strengthen the repair. Other muscles of the pelvis can also be used in a similar manner to fill the hernia defect. Due to the association of hormone imbalance and occurrence of perineal hernias, intact dogs are also castrated at the time of surgery.

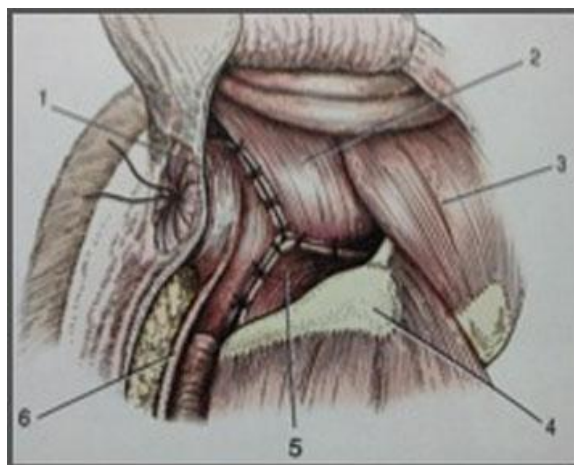


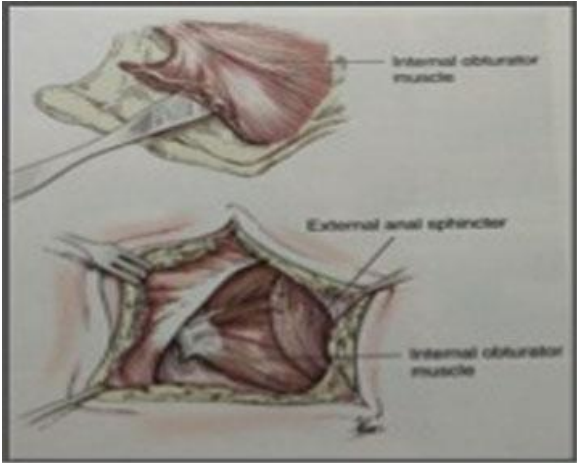
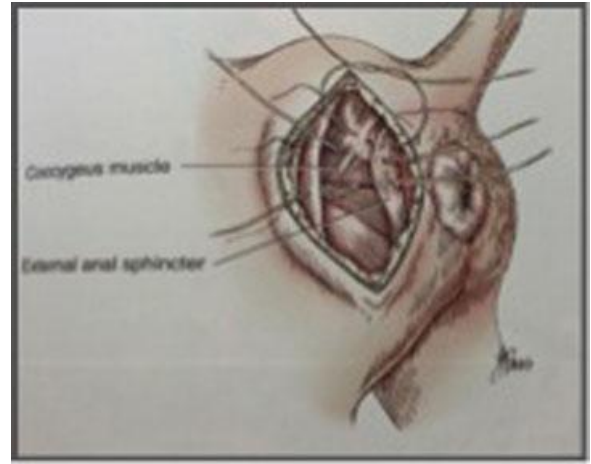
Figure 3: Suture placement for traditional herniorrhaphy (1, external anal sphincter; 2, coccygeus muscle; 3 superficial gluteal muscle; 4, ischial tuberosity; 5, internal obturator muscle; 6, retractor penis muscle)

What is the prognosis associated with perineal hernias?

In general, the prognosis for perineal hernia repair is good. Complications may include wound infection and abscess formation, straining to defecate, and very rarely, recurrence of the hernia. Post-operatively, a low-residue diet and stool softeners are used to help eliminate straining to defecate. Antibiotics are used to help decrease risk of infection. An Elizabethan collar is also used to prevent licking the surgery site and introduction of infection. Dogs with bilateral hernias have one side repaired at a



time
with
a 4-
6



week
lag



Figure 4: Schematics of the internal obturator muscle transposition procedure

Figure 5: Intraoperative picture of internal obturator muscle transposition

stress on the muscles of the pelvis.

between surgeries to avoid placing too much

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