

Perineal hernia

Indications & symptoms:

Unilateral or bilateral perineal hernia occurs most often in older, intact, male dogs, although it has been described in gravid female dogs, and occasionally in cats. It is caused by degeneration of the muscles that make up the pelvic diaphragm, leading to loss of support for the perineum. Signs include difficulties & straining to defecate, and often a bump can be seen on one or both sides of the anus during or after defecation. This bump is caused by feces accumulating in a pouch in the tissues next to the rectum/anus. In some cases intestinal loops, the prostate in a male dog (or uterus in a pregnant female) can move into this pouch or the urinary bladder can move in & cause urinary obstruction. Any animal with urinary obstruction should be seen by a veterinarian on an emergency basis.

Preoperative workup and other diagnostics:

- General physical examination, including a rectal exam to diagnose a weakened or disrupted pelvic diaphragm (a gap inbetween the muscles).

Preoperative laboratory work is generally indicated as this condition often occurs in older pet. It can range from baseline (for otherwise healthy pets) to more comprehensive, if the pet has severe clinical signs (especially if urinary obstruction is suspected)
Imaging: abdominal imaging might be indicated based on the pet's symptoms and signalment, and could include baseline radiographs and/or ultrasonography. Thoracic radiographs might be considered based on the pet's age, signalment & symptoms.

Procedure:

Depending on the severity of the perineal hernia (and organs entrapped), either the hernia alone can be addressed by herniorrhaphy (hernia repair), or potentially the colon or urinary bladder might need to be positioned back into the abdomen (belly) and pexied/attached in place.

<u>Herniorraphy</u>: the hernia repair can be performed in several ways, depending on the amount of tissue (muscle) left. Primary repair is typically only possible if muscles are still robust – which rarely is the case. The most commonly used technique is the internal obturator flap transposition (IOT). This technique utilizes a muscle on the floor of the pelvis that can be dissected free and 'flapped up' into the perineal defect. If the IOT technique has already been used prior, or if the muscle is not robust enough, a non-absorbable mesh (or surgical implant) can be sutured in place to create a new pelvic diaphragm. Other techniques that could be used are other tissues or other muscle flaps, but similar to mesh, these are generally reserved for very chronic cases without a lot of local tissue, or cases with hernia recurrence.

<u>Cystopexy</u>: in this procedure, the bladder is placed in an appropriate position in the abdomen (belly) and permanent adhesion is created between the bladder and the abdominal wall to keep the bladder from moving out of the abdomen into the perineum. This can be done at the same time as the hernia repair, or can be done separately, prior to hernia repair, if the pet is not stable enough for a longer anesthesia.



<u>Colopexy</u>: in this procedure, the colon is placed in an appropriate position in the abdomen (belly) and permanent adhesion is created between the bladder and the abdominal wall to keep it from moving towards the pelvis and perineum. This can be done at the same time as the hernia repair, or can be done separately, prior to hernia repair, if the pet is not stable enough for a longer anesthesia.

Complications:

As with any surgical procedure, there are always risks associated with general anesthesia. For otherwise healthy pets, these risks are usually low, but are considered increased in older animals, or animals with systemic illness.

Surgical risks & complications include:

- surgical site infection – any incision closer to the anus is at increased risk for infection. If a surgical implant (such as mesh) is used, this risk is increased and of more concern, as the implant (mesh) would need to be removed if it does become infected.

- bleeding: some larger vessels lie on the floor of the pelvic canal, and trauma to these vessels could lead to significant bleeding, and interfere with accurate visualization of other structures (such as nerves).

- neurologic trauma/issues: the nerves that innervate the anus lie closely to the muscles used to repair the hernia, and on the floor of the pelvic canal, together with the vessels. Stretching or other trauma to the nerves can cause incontinence. This might be temporary, or might be permanent.

- recurrence of the hernia – it is possible for sutures to fail over time, or for the muscles to stretch or tear – leading to a re-occurrence of a hernia and your pet will start to show similar signs to before.

Your surgeon will discuss these complications in more detail during your pet's visit

Postoperative Care:

In hospital care:

- We would typically keep your pet the first one or two nights after surgery for a scheduled procedure – but this might be longer if your pet presented through emergency (for example with a urinary obstruction due to the bladder getting trapped in the hernia). We will make sure your pet is comfortable, and is able to defecate appropriately prior to sending them home with you.

- An E-collar must be worn during the first 10-14 days to allow the incisions to heal. We will start your pet on the at home medications while in hospital, which also allows us to adjust the dose of stool softeners, if needed.

At home care:

- We would still recommend wearing an E-collar, and leash walks/exercise restriction for the first 10-14 days after surgery to allow all the incisions to heal.

- Your pet will be on stool softeners for the initial time after surgery, until we're sure that the site has appropriately healed. The dose/amount can be tapered or adjusted to make sure that the stool is of a soft consistency without it becoming too loose/runny.

- In some cases (especially if a mesh was placed) your pet will be prescribed a course of antibiotics that must be given until gone.



Veterinary Hospital

Prognosis

Good, although a hernia on the other side (if only one side was affected) can occur.