

# PERINEAL HERNIA REPAIR

#### What is a perineal hernia?

The perineum is the area surrounding the rectum and is commonly known as the "pelvic diaphragm" or "pelvic floor". When some, or all, of the muscles of the pelvic diaphragm weaken or are traumatised, this may lead to a hernia forming where abdominal organs are pushed out through the muscles and cause a swelling next to the rectum

Most commonly; organs that herniate through the perineal region are the colon, abdominal fat, prostate, urinary bladder and small intestines.

## What causes perineal hernias?

Almost 90% of animals with perineal hernias are older, entire (not desexed) male dogs. The hormones of entire male dogs alongside muscle differences in male dogs versus female dogs is believed to be the primary reason perineal hernias occur in this population. Most animals will also show symptoms of straining/constipation prior to the hernia forming.

Many patients with perineal hernias can be stable and generally well when they first develop the hernia. They can become serious issues depending on what organs have herniated. If the bladder becomes herniated, it may become impossible for urination to occur. This is a life-threatening emergency if it occurs. Similarly, intestines that herniate can become twisted and begin to lose blood supply. This can make animals very ill and is fatal if left untreated.

# What does surgery involve?

The goal of surgery is to replace herniated organs back into the abdomen and repair the muscle defect such that herniation is unlikely to recur. The muscle defect is repaired using a muscle nearby to the perineum that is sutured over the defect to close it. For most dogs, this surgery is the best chance at achieving a full recovery. If this muscle graft fails or a hernia re-occurs after surgery then repeat surgery using a synthetic mesh graft may be necessary.

Fasting is necessary for at least 24 hours prior to surgery.

### **Potential Surgical Complications:**

# Infection

Infection is a potential complication of any surgical procedure. Antibiotics at the time of surgery and sterile surgical techniques ensure that this risk is minimised. Despite these efforts, surgical site infections are still possible. Medical treatment is necessary to control infections when they occur. Infection can delay healing of skin and muscle which can slow down the recovery process.

# Haemorrhage

Haemorrhage (bleeding) is an expected part of any surgery. This is typically minimised and managed with routine surgical techniques. Major haemorrhage is rare but if it occurs, further medical treatment may be necessary including referal to an overnight emergency centre.

# Wound Issues (Swelling/Discharge/Breakdown)

Minor swelling is fairly common after perineal hernia repair. Severe swelling may indicate more serious complications. Any swelling, discharge or abnormal colouration at the surgical incision should be reported to your primary care veterinarian. It is also recommended patients wear an elizabethan collar during initial recovery period to reduce any licking or biting at the incision that may increase risk of infection or wound breakdown

#### Recurrence

Patients who have undergone previous repairs are at risk of a repeat herniation, especially if there is an underlying issue causing repeat episodes of straining. Recurrence is reported in 10-20% of cases with experienced surgeons.

## Neuropraxia and Neurologic Deficits - Faecal Incontinence

Neuropraxia involves altered sensation/feeling, weakness and abnormal function of a nerve. latrogenic damage (accidental damage associated with surgery) can occur if nerves are located very close to the surgical site.

Faecal incontinence is the loss of normal control of bowel functions. It is not uncommon for faecal incontinence to occur for a few days after surgery. This is generally from stretching of the rectal muscles during surgery and inflammation around the nerves of the rectum. Damage to the nerves that control defecation can unfortunately be permanent in some cases. This is more common if the perineal hernia has developed on both sides of the rectum at one time. This complication is reported in approximately 10% of cases.

# Sciatic Nerve injury

The sciatic nerve is responsible for leg movement and sits very close to the perineal muscles used during surgery. It is possible that a suture may unintentionally disrupt this nerve. It is reported to occur in up to 5% of perineal hernia repairs. Patients are monitored until they recover from surgery as this dysfunction is evident immediately after surgery. The patient will need to be reanaesthetised to remove the suture that is causing the problem if this occurs. Nerve injury can take weeks to months for patients to recover from but the vast majority recover fully.

# What to expect after surgery

Recovery generally takes 2 weeks for skin to heal and normal toileting function to return. An elizabethan collar is recommended to prevent biting or licking at the surgery site. It is possible to see straining to defecate and loss of normal control in the initial days after surgery and so frequent toilet walks are recommended. A prescription gastrointestinal diet is recommended for 2 weeks after surgery to reduce the risk of straining in the recovery period.