



Perineal urethrostomy (PU) in the cat

Indications:

Perineal urethrostomy entails removing the end portion of the urinary tract (including the penis) and making a new ‘stoma’ (urinary opening). This is a procedure that is only recommended if other management options are not possible, or have failed. Indications are:

- urethral obstruction that cannot be unblocked
- distal urethral tear or stricture
- recurrent urinary obstructions.

Preoperative workup and other diagnostics:

Most of these patients are referred for surgery either emergently or urgently.

Their work up includes:

- General physical examination prior to anesthesia
- Preoperative laboratory work & imaging:
 - Mostly done prior to referral to the soft tissue surgery service
 - But the workup will typically involve bloodwork & other lab analyses as well as imaging – starting with radiographs, and if needed additional imaging such as ultrasonography, CT, contrast study or contrast CT (especially in the cases where a tear or stricture is suspected).

Procedures:

During this surgery, the penis and the end-portion of the urethra are removed. A new opening (‘stoma’) is created that is of a larger diameter than the normal opening at the tip of the penis. This will allow small plugs to pass without obstructing the urinary tract.

The mucosa is sutured to the skin on both sides of the opening. This new opening is much closer to the anus than the position of the original opening.

If your cat also has bladder stones, these will be removed during the same procedure. To do this, an incision into his abdomen (belly) is made to approach the bladder. An incision into the bladder (cystotomy) is made, the stones are removed, and the incisions closed.

Complications:

- Anesthesia: 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 animals with systemic illness, such as urinary obstructions – especially for chronic obstructions.
- Surgical site complications:
 - Dehiscence of the stoma (this could lead to urine leaking into the tissues, creating a severe inflammatory reaction and potentially an abscess – potentially needing surgery).
 - Stricture (narrowing of the opening; this could predispose to obstructions, and a revision might be needed).
 - Abscess formation

- Increased risk for urinary tract infections, due to closer proximity to the anus, the wider opening, and the shorter length of the urethra.

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

In hospital care:

- Hospitalization and intravenous fluids are typically needed postoperatively to recover from surgery. Depending on severity and duration of urinary obstruction, it can be several days, or even longer, until your pet is healthy enough to continue care at home.

- litter box: paper only until the site has fully healed. This paper can be torn, but not in small shreds. This is to prevent anything from getting trapped in the stoma site.

- E-collar at all times.

At home care:

- Exercise restriction: leash walks/exercise restriction for the first 10-14 days after surgery to allow all the incisions to heal.

- Incision care: most important is to not clean the site. It is OK if there are some blood clots or if there is a scab. Cleaning, especially wiping, will damage the fragile tissue of the urethra and stoma.

- litter box: paper only until the site has fully healed. This paper can be torn, but not in small shreds. This is to prevent anything from getting trapped in the stoma site.

- It is important that your cat wears an E-collar at all times to prevent him from licking at the site. Similarly, he should be kept away from any furry housemates to avoid them cleaning the surgery site for him. The E-collar must be worn as long as the incision is still healing (first 10-14 days postoperatively) and until the site is checked during a recheck visit.

Prognosis:

Generally good, although your cat might be predisposed for urinary tract infections after surgery.