

PU:

No, it doesn't smell bad.

**Synopsis-- Anatomy and the Disease**

The male feline urethra is a small thing. The penile portion is a very small thing.

Sand, to a feline penile urethra, is a very large thing indeed! Add some mucus and inflammatory cells, and shazam! No go.

If the urethral obstruction is caudal to the pubic brim, the perineal urethrostomy (in a cat) is a useful urinary diversion surgery with low morbidity in the long run. (If the urethral obstruction is cranial to the pubic brim, prepubic urethrostomy is an option, though does have a higher risk of urinary incontinence. For those odd cases just at the pubic bone, a modified perineal urethrostomy with removal of the caudal margin of the pubis can be highly successful.)

Longterm, the PU procedure requires minor homecare accommodations and attention to signs of bladder infection.

Surgical Overview:

The perineum is clipped and prepared for aseptic surgery. Ideally, an indwelling urinary catheter is in place; alternatively, a sterile catheter can be placed by the surgeon. For completely obstructed patients, a catheter is not necessary.

The cat is placed in sternal recumbency with a rolled towel under belly and rearlegs hanging off table; the tail is Vetwrap-ed and pulled cranially (taped to collar or table next to head.)

The prepuce and scrotum are excised, exposing the caudal aspect of penis; the SQ and fascial supporting tissues are dissected to the level of the caudal pubis. The ischiocavernosus muscles are elevated from the ischium, and 360 degrees around the penis are cleared within the pelvic canal. The urethra is incised along the full length of the penis, spatulated and sutured to the skin margins creating a "drain board" to minimize urine scald. Urethral patency is confirmed; the goal is a diameter of approximately 4-6mm.

Urine culture is recommended and collected if multiple catheter attempts have been made or a catheter has been indwelling >12hrs.

The **indications & rationale** for surgical treatment are:

- Unresolvable urethral obstruction
- Recurrent urethral obstruction
- Penile trauma

The **perioperative experience** for pet and owner includes:

- In-hospital catheter management pending surgery.
- Outpatient obstruction relief pending surgery.
- Perineal bleeding/spotting up to 1-2wks postop.
- E-collar use when unsupervised, for 1-2wks postop.
- Non-clumping/non-clay cat litter use, indefinitely
- Clinical signs monitoring or scheduled urine cultures, screening for urinary tract infection, indefinitely
- Perineal hygiene management (routine clipping of medium/long haired cats)

Expectations for outcome are:

- Successful management of FLUTD-related penile urethral obstruction
- No change in FLUTD signs unrelated to obstruction
- No change in bladder stone related urethral obstruction cranial to pubis
- Typical litterbox utilization

Complications that may arise with this procedure are:

- Bleeding at surgery site (minor/occasional to major/rarely, requiring additional surgical manipulation)
- Short-term stoma obstruction/excessive granulation (rare, may require additional surgical manipulation)
- Long-term stoma obstruction/stricture (very rare, will require surgical revision)

Postoperative **outcomes may be poor** due to the above complications, and/or:

- Recurrent FLUTD signs
- Recurrent urinary tract infection
- Novel/recurrent urolithiasis

What the surgeon needs preoperatively:

- Urinary tract diagnostics sufficient to rule-down/rule-out significant urolithiasis (or documented owner decline)
- Detailed history of catheter interventions performed or attempted.

General considerations and complications for all surgery/anesthesia procedures are:

- *Difficult and/or painful anesthetic recovery (variable; may require additional medications or re-hospitalization)*
- *Incisional infections (rare, minor; usually require oral antibiotics)*
- *Incisional dehiscence (rare, minor or major; may require surgical revision)*
- *Adverse anesthetic event (rare, major; may result in serious impairment or death)*

Proper owner expectations are important to a successful experience and patient outcomes. Please discuss this information with your clients while assisting them with decision-making for **Perineal Urethrostomy**.

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