

Feline Urinary obstruction: What's new

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While urinary obstruction is common in cats, there is still a lot of to be learned! The goal of this hour is to update clinicians on recent publications in veterinary medicine, and how we might be able to use this information to better care for our blocked cats.

What did COVID do?

Finstad JB, Rozanski EA, Cooper ES. Association between the COVID-19 global pandemic and the prevalence of cats presenting with urethral obstruction at two university veterinary emergency rooms. J Feline Med Surg. 2023 Feb;25(2)

Cats didn't necessarily like the change of stay at home orders in some places. Rate of UO increased during early months of the pandemic.

What about a PU?

Perineal urethrostomy (PU) has classically been considered as a salvage procedure, or after "3 strikes" role. However, given that the cost of multiple episodes of urethral obstruction can be in the many thousands of dollars, earlier PU surgery has a good chance of a happier and lower cost outcome. Additionally, the transition of PU to surgical practices further increases the cost, so consideration for returning the PU to general practices may be very rewarding.

Slater MR, Pailler S, Gayle JM, Cohen I, Galloway EL, Frank KA, DeClementi C. Welfare of cats 5-29 months after perineal urethrostomy: 74 cases (2015-2017). J Feline Med Surg. 2020 Jun;22(6):582-588.

PU may have complications such as stricture or dehiscence, and surgical technique is considered vital to a good outcome.

Do they need blood?

Solari FP, Mickelson MA, Bilof J, Odunayo A, McPhetridge JB, Scharf VF, Yuan L, Mochel JP, Walton RA. Retrospective evaluation of the prevalence and risk factors associated with red blood cell transfusions in cats with urethral obstruction (2009-2019): 575 cases. J Vet Emerg Crit Care (San Antonio). 2024 May-Jun;34(3):262-267.

Severe anemia (<20%) was rare (~ 1%) and associated more commonly with perineal urethrostomy. Cats getting transfusions had a higher rate of death, but overall survival was very high at 96%.

Do they need antibiotics?

No with a caveat!

Cooper ES, Lasley E, Daniels JB, Chew DJ. Incidence of bacteriuria at presentation and resulting from urinary catheterization in feline urethral obstruction. J Vet Emerg Crit Care. 2019 Sep;29(5):472-477.

Do they get volume overload/heart failure

Duperrier-Simond C, Pouzot-Nevoret C, Allaouchiche B, Nectoux A, Cadore JL, Krafft É. Occurrence of cardiovascular events in 168 cats with acute urinary tract obstruction. Can Vet J. 2024 Jan;65(1):67-74. They

occasionally get ectopy or volume overload. Cats with high potassium are more likely have issues. * watch high potassium!

Ostroski CJ, Drobatz KJ, Reineke EL. Retrospective evaluation of and risk factor analysis for presumed fluid overload in cats with urethral obstruction: 11 cases (2002-2012). J Vet Emerg Crit Care (San Antonio). 2017 Sep;27(5):561-568.

Rare fluid overload, but associated with fluid bolus, and development of new murmur or gallop.

What about prazosin?

Probably not, with caveats

Conway DS, Rozanski EA, Wayne AS. Prazosin administration increases the rate of recurrent urethral obstruction in cats: 388 cases. J Am Vet Med Assoc. 2022 May 21;260(S2):S7-S11.

What about tamsulosin? [alpha blocker]

Wang Z, Diaz A, Isdale R, Kofron K, Carr SV, Lappin M. Effect of tamsulosin on urethral tone in healthy male cats. J Feline Med Surg. 2024 Feb;26(2):1098612X231220845.

Doesn't seem to help..

What about urethral tears

More common if hard to unblock or if multiple catheter attempts.

Manchester RB, Hess RS, Reineke EL. Difficult catheterization and previous urethral obstruction are associated with lower urinary tract tears in cats with urethral obstruction. J Am Vet Med Assoc. 2023 Oct 6;262(2):187-192. doi: 10.2460/javma.23.07.0419. PMID: 38244269.

Anything else?

Does early neutering matter? No

Sampaio KO, Silva-Junior VAD, de Sousa-Filho RP, Aleixo GAS, Mori da Cunha MGMC, da Silva ECB. Neutering is not associated with early-onset urethral obstruction in cats. J Feline Med Surg. 2022 Dec;24(12):e611e617.

Does sedation versus anesthesia matter?

No

Perrucci J, Walton R, Zorn C, Yuan L, Mochel JP, Blong A. Retrospective evaluation of the effect of inhalant anesthesia on complications and recurrence rates in feline urethral obstruction. J Feline Med Surg. 2023 Feb;25(2):1098612X221149348.

How do they really do?

~ 30% death rate, primarily due to euthanasia!

Beeston D, Humm K, Church DB, Brodbelt D, O'Neill DG. Occurrence and clinical management of urethral obstruction in male cats under primary veterinary care in the United Kingdom in 2016. J Vet Intern Med. 2022 Mar;36(2):599-608.

Should you flush the bladder?

You can if you want, but it doesn't help.

Tsuruta K, Butler A, Goic J. Effect of intermittent bladder flushing on recurrence rate in feline urethral obstruction: 72 cases. *Can Vet J*. 2022 Dec;63(12):1236-1241.

Dorsey TI, Monaghan KN, Respass M, Labato MA, Babyak JM, Sharp CR, Rozanski EA, deLaforcade AM. Effect of urinary bladder lavage on in-hospital recurrence of urethral obstruction and durations of urinary catheter retention and hospitalization for male cats. *J Am Vet Med Assoc*. 2019 Feb 15;254(4):483-486.

Urethral tears?

Manchester RB, Hess RS, Reineke EL. Difficult catheterization and previous urethral obstruction are associated with lower urinary tract tears in cats with urethral obstruction. *J Am Vet Med Assoc*. 2023 Oct 6;262(2):187-192.

It is not you; it is the cat!

Anything weird?

Jerabkova P, Mattoon JS, Darveshi BRM, Owen TJ. Recurrent lower urinary tract signs in a 4-year-old male castrated domestic longhair cat. *J Am Vet Med Assoc*. 2024 Jun 19;262(9):1265-1268. doi: 10.2460/javma.24.03.0173. PMID: 38901461.

Described a cat with grass awn in the urethra.