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URETHROADENOCYSTITIS AND UROLITHIASIS IN MALE CATS

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Pseudomonads were isolated from the urine of 11 successive cats with urethal blockage, and Proteus was also present in the most severe cases. Other organisms found included **E coli**, Aerobacter, **Staph albus**, **Strep fecalis**, **Alcaligenes fecalis**, and paracolon bacilli, probably as secondary invaders. Such factors as diet and cold probably contribute to the development of obstructive urolithiasis only by lowering resistance to infection. Copious amounts of triple phosphate crystals appear in the urine when it is alkaline in the morning and after meals, but they are not abrasive and pass readily unless some necrotizing agent like Pseudomonas is resident. The crystals then become entangled in the exudate, forming a soft mass which later can inspissate. In early stages, infection is present in the bladder; later the urethra, prostate and bullbourethral glands can become infected.

Diagnosis can be made before blockage occurs. The cat often squats for as long as 10 minutes as if urinating, leading the owner to suspect constipation. He passes only a drop or so of bloody urine; the bladder is empty. On abdominal palpation, the irritated bladder suddenly contracts into a hard lump. It will relax in 5 to 15 minutes if undisturbed, or with anesthesia. In obstruction, the bladder is distended. Even a hard mass of crystals can usually be broken up with a 1-mm wire loop. The bladder can then be catheterized (aseptically, to allow urine culture) and washed out. A final washing with 1/12 N sulfuric acid will dissolve remaining crystals and make exudate more fluid. Local anesthesia is sufficient. The patient should be examined again in a week if much flocculent material has been washed, otherwise in 4 to 6 weeks. If he gets along well, the intervals can be extended.

Primary antibiotic treatment may be chloramphenical or oxtetracycline. The drug chosen after sensitivity may need to be changed during subsequent episodes, as resistance patterns change. If there is no recurrence, probably the patient has become immune to the organism. One of the 11 cats described was moribund when admitted and died within an hour. The others were treated according to this system, and all have remained well.