A New Type of Urinary Catheter for Catheterization of the Male Ferret

Angela M. Lennox, DVM, Dipl ABVP-Avian Practice and Marla Lichtenberger, DVM, Dipl ACVECC

Urinary catheterization of the male ferret is difficult due to the unique J-shaped os penis and the unusually small distal urethral orifice (Fig 1). The most common indication for catheterization of the male ferret is obstructive disease of the urethra, often secondary to urolithiasis or prostatic disease associated with adrenal disease. In the case of complete obstruction, rapid and efficient catheterization becomes an essential part of management.

Catheterization can also be utilized for collection of urine samples and infusion of contrast media.

In the case of urinary obstruction, the ferret may require emergency stabilization, including correction of hyperkalemia if present. A more complete discussion of treatment of urinary obstruction in the ferret has been published.2

Fig 1. Diagram of the urinary tract of the male ferret. Note the J-shaped os penis.

Fig 2. The Slippery Sam (top) and the Tomcat Urethral Catheter with stylet in place (bottom). Both catheters are shown in the 3.5 Fr size.
Prior to development of more sophisticated urinary catheters, practitioners relied on red rubber feeding catheters, long jugular catheters or other materials with varying degrees of success. In some cases, urolithiasis of the distal urethra could be relieved to some extent by the use of items, such as short IV catheters without the stylet or blunt needles, which carried the risk of iatrogenic damage to the urethra.

The Slippery Sam Tomcat Urethral Catheter (Smiths Medical, www.surgivet.com), which was introduced some years ago as an alternative for catheterization of the male cat and ferret, was associated with a higher rate of success (Fig 2). The Slippery Sam Catheter is made from polytetrafluoroethylene (PTFE) and is available in 2 sizes: 3.0 and 3.5 Fr.

A new style of catheter has been introduced for use in cats (Tomcat Urethral Catheter, Smiths Medical, www.surgivet.com), which has been shown by the authors to be highly effective for catheterization of the male ferret. This catheter is made of silicone, is available in both 3.0 and 3.5 Fr sizes, is sterile, and unlike the Slippery Sam Catheter, is steam autoclavable. The catheter is flexible with a rounded tip and is equipped with a fine flexible wire-guide stylet to enhance introduction into the distal urethra (Fig 2).

Ferrets should be administered analgesics and sedated or anesthetized prior to catheterization, depending on patient condition. Placement of the catheter is straightforward. The penis and os penis are carefully exteriorized by slipping the prepuce caudally and held in position. The tip of the catheter should be lubricated prior to placement. The tip of the catheter is positioned at the ventral distal part of the penis at an angle and gently pushed proximally until the tip engages the small slit-like urethral orifice. Magnification may aid this process. The catheter and stylet are gently introduced into the urethra to the level where the stylet can be withdrawn and the catheter advanced to the bladder (Fig 3).

The catheter can be secured with suture to the prepuce. Unless the animal is extremely ill, most ferrets will eventually attempt to remove the catheter; therefore, an Elizabethan collar should be fitted at the time of catheter placement. To prolong its placement, the collar can be crisscrossed under the arms in a figure-of-eight pattern, and the ferret sedated with fentanyl/ketamine CRI or buprenorphine at high doses (0.04-0.06 mg/kg q12h) plus ketamine until the collar is removed.

References and Further Reading