



New medical treatment for pyometra in the breeding jill

There is new hope for the treatment of pyometra in breeding jills. The traditional treatment for pyometra is to spay the jill. In young and previously healthy jills, however, treatment with prostaglandin F_{2-alpha} (Lutalyse, Pharmacia & Upjohn Animal Health) has shown promising results.

Pyometra is a life-threatening infection of the uterus that every ferret-knowledgeable veterinarian should be prepared to treat. Pyometra develops predominantly in breeding jills. The infection is at a dangerous level when an owner notices the signs, therefore, any emergency service veterinarian is a candidate to receive a visit from an anxious breeder who might usually employ a different hospital.

As in cats and dogs, pyometra is caused by bacteria from the vagina invading the sterile uterus usually following false pregnancy or parturition. If the uterus has retained any fetal or placental tissue, this tissue serves as a host for the bacteria. The dangers of pyometra are that the toxins and bacteria will breach the uterine wall and enter the bloodstream and that the uterus may burst. Untreated, pyometra is fatal.

SIGNS

Owners will most often present a jill with smelly, pinkish brown vaginal discharge. (When discharge is not present, pyometra is more difficult to diagnose and is more dangerous to the jill because all of the toxins are trapped in her body.) Anorexia, lethargy, and depression may also be reported. A breeder who suspects that a jill's health is changing should take her temperature every day. An increase in temperature warrants a veterinary examination. Waiting for other signs to develop will put the jill's life at risk.

Veterinarians can take additional diagnostic steps. Radiographs may show enlarged uterine horns (**Figure 1**) or a distended uterus. *E. coli*, *Staphylococcus*, *Streptococcus*, and *Corynebacterium* may be cultured from the uterus.

TREATMENT

Surgical

Ferrets with pyometra routinely are spayed. The procedure should leave as little uterine tissue as possible to decrease the likelihood of stump pyometra forming. Although the spay

procedure is routine, the health status of the patient is often critical. The surgery, therefore, can be especially challenging. The benefit to surgical treatment is that the infection can be resolved rapidly.

Medical

More aggressive medical treatments are now being used to permanently treat pyometra and save a jill from being spayed. Judi Bell, DVM, recommends treatment with Lutalyse (personal correspondence, June 7, 2000). Lutalyse causes the destruction of the corpus luteum following false pregnancy. This allows the uterine tissue to be expelled. In treating pyometra, Lutalyse encourages expulsion of the infected remnant tissue. Concurrent treatment with an antibiotic should be pursued.

The first step of the Lutalyse treatment is rehydration and antibiotics, in that order, as many antibiotics are toxic to kidneys stressed by dehydration. Ideally, the antibiotics are selected after determining the nature of the infection, but most pyometras are caused by *E. coli*, and these bacteria are usually sensitive to trimethoprim sulfa, amoxicillin, enrofloxacin, and chloramphenicol.

Next, administer Lutalyse intramuscularly at 0.1 to 0.2 mL per jill. If the hormone oxytocin is administered a few hours later,

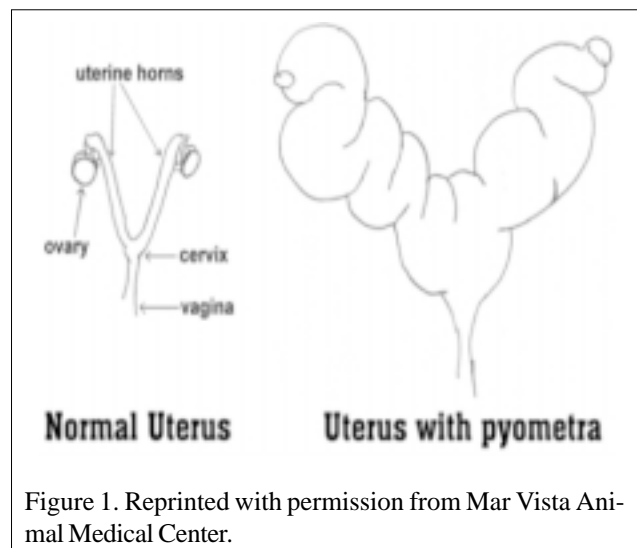


Figure 1. Reprinted with permission from Mar Vista Animal Medical Center.



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the jill should expel a lot of the debris from the uterus. Although this makes the discharge look much worse, the jill will feel much better. To increase the jill's comfort level, then administer an anti-prostaglandin. Banamine (flunixin meglumine, Schering-Plough Animal Health) is preferred for its analgesic and anti-inflammatory effects. Administer 0.1 mL twice daily. Again, ensure that the jill remains well hydrated.

On day two of treatment, palpate the uterus to determine whether the uterus has contracted or more prostaglandin is needed. Generally, a second round of prostaglandin is not necessary. Continue the Banamine, parenteral fluids, and antibiotic for several days, according to the jill's condition.

Banamine potentially can cause gastrointestinal ulcers in many species, including ferrets, although there is not reason to believe that ferrets are especially susceptible. Cautious use of Banamine is advised, however, especially in chronically ill ferrets that have been eating poorly.

During 1999's breeding season, treatment with Lutalyse saved a Shady Hollow Ferretry jill with pyometra (Sally Heber, personal correspondence). The jill was bred this year, and she successfully delivered kits.

PREVENTION

Pyometra can be prevented only by spaying a jill. Any jill that will not be used in a breeding program should be spayed to reduce many medical risks, including pyometra.

SOURCES

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