Pyometra

What is pyometra?

Pyometra is a hormonally mediated, severe infection of the uterus (womb). The hormone progesterone plays a key role in the development of this condition as it makes it easier for a non-pregnant uterus to become infected by bacteria. Bacteria can reach the uterus via ascension of normal flora from the lower portion of the genitourinary tract, or less frequently, by blood-borne spread.

The incidence of pyometra is greater in the bitch than the queen, although this may be purely because a higher proportion of cats are neutered compared to dogs.

What are the symptoms of pyometra?

Pyometra can occur with or without vaginal discharge, depending on the patency of the cervix. Closed-cervix pyometra is more serious, due to the potential for uterine rupture, causing serious consequences.

The classic signs of pyometra may include all or some the following:

- Copious malodorous vaginal discharge (*common*). This is not always seen as it depends if the cervix is open or closed.
- Excessive thirst and urination (*common*)
- Absent or reduced appetite (*common*)
- Lameness or abdominal discomfort
- Fever
- Lethargy
- Weight loss
- An unkempt appearance
- Vomiting and/or diarrhoea

You often find the season prior to a pyometra occurring is often very abnormal. Your pet may not have had a season for a while and then one appears suddenly, or the season is particularly heavy or prolonged.

What tests are needed?

If a vaginal discharge is present, often no further investigation is required. If no discharge is noted, but the suspicion of pyometra is still present, the next stage would be to perform an ultrasound scan. This will generally be diagnostic for most cases. The image on the right shows the bladder on the right and a fluid/pus filled uterine horn on the left.

In those more subtle cases of pyometra, we may want to do blood tests or x-rays. Pyometra can occur in one uterine horn, and even with viable pregnancy in the other.
What treatment is needed?

This condition can be life-threatening and so prompt action in all cases following diagnosis is imperative.

The treatment of choice for all pyometras is to perform an emergency spaying operation (ovariohysterectomy). This will normally take place after initial patient stabilisation with intravenous fluid therapy (putting on a drip) and antibiotics. This procedure is almost 100% curative with the animal feeling almost instantly better.

This obviously prevents any further litters and so may be a contentious issue in breeding animals. In animals where spaying is unacceptable for breeding or other health reasons, medical treatment can be attempted but is a risky approach and is neither guaranteed nor often permanent.

Medical treatment involves the use of powerful hormone drugs in combination with several antibiotics. These drugs can cause unpleasant side-effects such as vomiting, diarrhoea and abdominal cramps. **Medical treatment should only be attempted in animals where surgical intervention is deemed to higher risk for the animal.**

Very occasionally medical treatment may be used as part of the initial stabilisation protocol with a view to surgery once they are feeling better. If medical treatment alone is used, the chance of the pyometra returning at a later date is very high.

Are there any complications with surgery?

The operation performed during pyometra surgery is essentially the same as having a normal routine spaying operation. The main differences are as follows:

- Pyometra surgery is generally performed on older animals.
- Pyometra surgery is performed when an animal is poorly.
- The blood supply to a womb with pyometra is greater, making the risk of haemorrhage higher.
- With a pyometra there is the risk of uterus rupture (before or during surgery) which can cause serious problems.

All these factors are taken into consideration and suitable steps are put in place to minimise the risks associated. **By far the majority of pyometra operations go without complications.**
What is the prognosis?

After surgery, most animals will normally stay in the hospital for 24-48hrs depending on their response. Most animals will return to normal behaviour within 2-3 days and once the sutures are removed will never look back. Obviously there will be no risk of the condition occurring again as the uterus will have been removed. If the pyometra has ruptured or the uterus has perforated, then things are quite a bit more serious as the animal may develop potentially life threatening peritonitis. This risk is reduced the earlier the condition is diagnosed.

If medical treatment is successful, there is still a medium to high risk that the condition may return and there tends to be a lower conception rate for future pregnancies.

If medical treatment is unsuccessful, the animal will still require the surgery.

In older animals it is always useful to
- Make a note of the times and intervals that your bitch comes into season
- Be aware if this pattern is suddenly abnormal or interrupted and this may mean a problem is on its way.
  (It is worth noting that dogs/queens do not have a menopause like humans.)
- Pyometra should always be suspected in any older entire female with malaise.