

# Mastitis

## BASIC INFORMATION

### Description

Mastitis is inflammation and/or infection of one or more mammary glands (breasts). It is an uncommon condition in dogs and cats. It usually arises immediately after a pregnancy or during a pseudopregnancy.

Pseudopregnancy occurs most often in the dog and is a condition in which the dog displays many features of being pregnant but is not.

### Causes

Most cases of mastitis involve infections that arise when bacteria are introduced through the open teat of the breast or when bacteria spread to the mammary tissue from another site via the bloodstream. Lactation (production of milk) during the postpartum period (after giving birth) allows bacteria easier access to the mammary gland.

Mastitis can arise from abnormal collection of milk within the mammary glands and is sometimes associated with poor hygiene. Rarely, mastitis may occur from the trauma of kittens or puppies suckling. Conversely, young offspring with an infection may transfer the bacteria to the mother, who subsequently develops mastitis.

### Clinical Signs

Mastitis can occur suddenly (acute mastitis) or develop slowly and become chronic. Signs of acute mastitis include the following:

- The involved glands are swollen, reddened in appearance, and tender to the touch.
- Some affected animals are lethargic, have a fever, and do not eat well.
- One or more glands may be involved, with the last pair of glands (closest to the rear legs) being the ones most commonly affected.
- When an affected gland is squeezed, discolored milk or secretions that contain blood or pus may be seen.
- Severely involved glands can become gangrenous or abscessed and may occasionally



develop deep ulcerations (sores).

- The offspring may become sick or die in some cases.

Chronic mastitis may be an incidental finding, especially in older, nonlactating, intact (unspayed) cats. With chronic mastitis, minimal inflammation may be present, but thickened tissue or nodules are detected. These changes are similar to those seen with mammary tumors.

### **Diagnostic Tests**

A tentative diagnosis can often be made based on physical examination findings consistent with mastitis. Laboratory tests may indicate the presence of an infection (high white blood cell count).

Examination of a milk sample may show a high cell count that is consistent with an infection. Culture of the milk helps to confirm the type of bacteria present and to identify possible antibiotic choices.

## **TREATMENT AND FOLLOW-UP**

### **Treatment Options**

It is important that therapy be started shortly after confirmation of the diagnosis. appropriate antibiotics are started immediately, even while the culture results are pending. It is important that the affected glands be kept empty of secretions, which can be done manually by some owners.

The offspring should stop nursing as infection can spread to them and it is very difficult to keep them from nursing on affected glands. Hand rearing is required.

In severely diseased (abscessed or gangrenous) glands, milk secretions may be stripped from each gland twice daily (not strongly advised) and warm, wet compresses are applied to help with healing. Surgical drainage may be done in some cases. More radical surgery (mastectomy) may be recommended for glands that do not respond to treatment.

If the mother is systemically ill, hospitalization may be necessary to allow more intensive therapy (such as intravenous fluids or injectable antibiotics).

### **Follow-up Care**

Recheck visits may be needed to monitor response to treatment and determine how long the antibiotics should be given. Notify your veterinarian if any clinical signs worsen or if more glands become involved once therapy has started.

### **Prognosis**

Prognosis for most animals with mastitis is good, especially if treatment is begun without delay. Recovery may be slower or more complicated in animals that are seriously ill and require hospitalization.