

# PROSTATIC DISEASES

## About the Diagnosis

Like male human beings, male dogs and cats have prostates. The prostate gland is located in the abdomen (the belly), and it surrounds the neck of the urinary bladder and part of the urethra (the tube that carries urine from the urinary bladder and through the penis). The prostate secretes a fluid that enhances motility and fertility of sperm and is therefore important in reproduction. Prostatic diseases are common in male dogs, especially as they age, but are very rare in male cats.

**Cause:** There are many types of prostatic diseases, each with its own cause(s). All of these disorders lead to enlargement of the prostate gland (prostatomegaly), which can sometimes be painful and/or can interfere with normal evacuation of feces (stool) or urine.

- **Prostatitis** is an inflammation of the prostate gland, usually due to bacterial infection. Prostatitis has a wide range of severity, from mild discomfort to severe or even life-threatening illness if it causes sepsis (blood-borne infection/blood poisoning). Prostatitis is more likely to happen in dogs that are not neutered.
- **Prostatic abscesses** are collections of pus within the gland that result from prostatitis. These can become large and life-threatening. Therefore, one of the goals of treatment of prostatitis is to reduce the risk of prostatic abscesses.
- **Paraprostatic cysts** are benign, fluid-filled sacs connected to the prostate gland by a thin stalk. These cysts can become quite large but are generally harmless, unless their sheer size interferes with surrounding organs. Their cause is usually not clear.
- **Prostatic neoplasia** (cancer) can occur in dogs and is more common in older dogs. This cancer may spread to other locations (metastasize) or may have originated in another location such as the urinary bladder (secondary cancer).
- **Benign prostatic hyperplasia** is caused by male hormones and is common in middle-aged to older dogs. It is most commonly a harmless condition in itself, although it may make it easier for other diseases of the prostate to occur. Benign prostatic hyperplasia occurs more often in unneutered dogs than in neutered dogs. It is the most common cause of prostatic enlargement ("prostatomegaly") in dogs.
- **Squamous metaplasia** is a generally harmless enlargement of the prostate caused by excessive estrogen. High estrogen levels in male dogs are usually the result of benign testicular tumors.

**Diagnosis:** The veterinarian will want to know about the nature and occurrence of symptoms, and will take a complete history from you including observed symptoms, duration of symptoms, any current medications, and so on. The veterinarian also will perform a thorough physical exam, including rectal palpation, to try to determine if the prostate gland is abnormal. Many times, further diagnostic testing is required to differentiate the cause of an abnormal prostate. These tests can include abdominal x-rays, ultrasonography, fine-needle fluid aspirate, culture of urine or other fluid aspirated, prostatic massage to collect material from the gland, and biopsy of the prostate. Blood tests (complete blood count [CBC], serum biochemistry profile, and coagulation profile) and urinalysis with urine culture may be done to assess overall health status and to determine if your dog is a candidate for sedation or anesthesia, which are required for fine-needle aspirate and biopsy. However, unlike in human medicine, there is no single blood test for the prostate in dogs, which is why a combination of other tests is usually necessary. Not all tests are appropriate for all dogs. Your veterinarian can discuss these tests with you.

## Living with the Diagnosis

Care at home largely depends on the specific type of prostatic disease that has been diagnosed. Give medication exactly as directed. If your dog has asymptomatic benign prostatic hyperplasia, it is important to know that symptoms can develop at any time. Prostatitis and abscesses may recur, and a recurrence of original symptoms is generally the most important cue that a veterinary visit is necessary without delay. In general, the most important symptoms to watch for have to do with bodily functions. There should not be any excessive difficulty in passing urine or stool. These types of difficulties, if they occur, can be due to ongoing disease of the prostate and may cause urinary or intestinal blockage. Therefore, if a dog with prostatic disease shows these symptoms or otherwise is feeling worse (e.g., decreased appetite or energy level, vomiting, labored breathing), then an immediate recheck is warranted.

Often, neutering is performed if the prostate is causing problems from excessive enlargement; this allows the prostate to shrink over several weeks' time. If your dog has recently been neutered, observe the incision closely

and contact your veterinarian if you see swelling, oozing, or redness. Follow all take-home instructions carefully.

## TREATMENT

Treatment depends on the cause. Benign prostatic hyperplasia and squamous metaplasia may be treated by neutering to remove the source of hormones that cause these processes. Prostatitis is treated with antibiotics and may require hospitalization and the administration of intravenous fluids in severe cases. Neutering may then be recommended when the dog is stable. Abscesses may be drained surgically or via fine-needle aspirate, and antibiotics are given. Here, too, hospitalization and the administration of intravenous fluids may be required. When the dog is stable, neutering may be recommended. Paraprostatic cysts are treated with surgical removal or periodic needle drainage (temporary solution); neutering may be recommended. Prostatic cancer generally is quite serious and unfortunately commonly shortens the life span of dogs that have it. Although surgical excision of the gland (prostatectomy), chemotherapy, radiation therapy, and hormonal therapy are options, their success has been limited. Because of the seriousness of prostatic cancer, it is essential that the diagnosis be a definitive one. That is, the cancer must be seen conclusively by the laboratory on a prostatic biopsy specimen.

Medication to control pain (analgesics) may be given for all forms of symptomatic prostatic disease causing discomfort.

## DOs

- Inform your veterinarian if your dog has ever been diagnosed with a medical condition and is taking medication.
- Give medication exactly as directed by your veterinarian, and if you are concerned about possible negative effects, discuss them with your veterinarian immediately rather than simply discontinuing the treatment.

## DON'Ts

- Do not postpone visiting your veterinarian if you observe any symptoms of prostatic disease in your dog (see Signs to Watch For). Certain types of prostatic disease such as acute prostatitis and prostatic abscesses may be life-threatening and require immediate treatment.
- Do not give medication that you have at home that has been prescribed for human use; some of these may interfere with treatment and cause even more severe problems.

## When to Call Your Veterinarian

- If you cannot keep a scheduled appointment.
- If you are unable to give medication as directed.
- If your dog is not improving after treatment begins.

## Signs to Watch For

- General signs of illness: lethargy, weakness, vomiting, decreased appetite, weight changes, other behavior changes.
- Signs of prostatic disease: blood in the urine (hematuria), blood dripping from the penis at any time, straining to defecate (tenesmus) or urinate (stranguria), recurrent urinary tract infections, infertility, painful abdomen, abnormal walk in the hind legs.

## Routine Follow-Up

- Follow-up appointments are typically scheduled to monitor progress, to adjust the treatment plan if necessary, to pursue any abnormalities on previous blood tests, and to discuss or perform neutering.