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Cryptorchidism in Dogs and Cats

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BASIC INFORMATION

Description

Cryptorchidism is the failure of one or both testes to descend into the scrotum; descent usually occurs within 6-8 weeks after birth but may take as long as 6 months. The undescended testicle may be located within the inguinal canal (the groin), in the abdominal cavity, or alongside the penis and prepuce (sheath for the penis) at the base of the scrotum. Cryptorchidism usually involves only one testicle and is more likely to affect the right testis. A testicle that is not in the proper location is termed an *ectopic* testis.

Causes

This is a congenital anomaly that has a reported incidence of approximately 1-10% in dogs and up to 2% in cats. The anomaly is thought to be a trait that can be inherited.

Small-breed dogs are 2.7 times more likely to have this problem. Dog breeds thought to be more commonly affected include the Chihuahua, German shepherd dog, miniature schnauzer, Pomeranian, poodle, Shetland sheepdog, Siberian husky, and Yorkshire terrier. The Persian cat may also be affected.

Clinical Signs

There are usually no signs directly related to the retained testicle. Most signs are related to the development of one or more tumors within the retained testicle. Dogs with a retained testicle are about 14 times more likely to develop a testicular tumor.

Some tumors produce clinical signs associated with their production of estrogen. Dogs may take on female characteristics such as large nipples, hair loss, decreased size of the prepuce, and attraction of other males. The excess estrogen may also cause anemia, bleeding problems, and prostatic disease.

Testes that are not in the normal location are also more susceptible to testicular torsion (twisting of the testicle around its cord). Testicular torsion usually affects testes retained in the abdominal cavity, because of greater mobility compared with the usual location within the scrotum. Dogs with this condition often present with acute abdominal pain, vomiting, abdominal distention, fever, and lethargy.

Diagnostic Tests

Diagnosis of cryptorchidism, especially in the younger animal, can be difficult due to the location of the testis or its small size. Ectopic testes outside the abdomen can often be palpated (felt with the finger tips), but they are usually smaller than normal, which makes palpation in some cases very difficult. Intra-abdominal testes are almost impossible to palpate unless they are enlarged because they are tumorous or a torsion is present. If a tumor or testicular torsion is suspected, abdominal x-rays or ultrasound help confirm the diagnosis.

TREATMENT AND FOLLOW UP

Treatment Options

Some medical and surgical attempts (orchiopexy) to move ectopic testes into the scrotum have been largely unsuccessful and probably should not be done, because the condition may be inherited.

- Although a retained testicle should always be removed because of its potential for developing a tumor, both testicles (assuming one has descended correctly into the scrotum) are usually removed at the same time because of the likelihood this anomaly will be passed on to future generations.
- Removal of the ectopic testis may require a skin incision over the testicle or may require abdominal exploratory surgery.
- Testicles that have developed tumors can become very large, but removal may still be worthwhile, because many of these tumors are benign.
- The clinical signs related to increased estrogen that is secreted by some tumors usually subside—even the anemia, which in some cases can become severe.
- The overall health of the prostate gland may also improve from removal of the estrogen-secreting tumor.

Dogs with testicular torsion require stabilization prior to surgery, which is considered an emergency procedure. These dogs often have acute and unrelenting abdominal pain, and they may become seriously ill very quickly.

Follow-up Care

Most animals undergoing cryptorchid surgery do well postoperatively. However, if the surgery is done for a tumor or testicular torsion, the convalescent period is longer, and more intense monitoring and treatment are usually needed.

Prognosis

Prognosis is good if the testicle is removed before any problems develop. Long-term outlook in dogs castrated for testicular torsion or neoplasia is fair to good.

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