

PROSTATE DISEASE IN DOGS

By Hans Andersen

Prostate problems in dogs are common, but are rarely as dramatic as Choco's (see separate story). Straining as if to pass stools (tenesmus), blood dripping from the penis, urinary tract infections, urinary leakage or sometimes difficulty peeing, and pain in the hindquarters are more common symptoms. Prostate cancer is fortunately rare in dogs.

The common feature with all prostate problems is some degree of prostate enlargement. This is initially diagnosed by rectal examination, but sometimes the enlarged prostate can also be felt in the abdomen. Then the diagnostic challenge facing us as vets is to find out what disease process is causing the enlargement.

An ultrasound scan coupled with examination of cells and fluid from the enlarged prostate by fine needle aspiration usually diagnoses the problem. Sometimes X-rays and bacterial culture are needed.

What prostate problems might we find?

Benign prostatic hypertrophy (BPH) is a very common finding in middle aged and older dogs. It occurs because there are changes in the balance of sex hormones as dogs age. These changes influence the glandular structure of the prostate so that it enlarges and becomes more prone to forming small cysts. This change is called benign hypertrophy because it is non-cancerous enlargement and is usually not a problem in the early stages.

However a number of problems can develop. It is important that all entire (uncastrated) male dogs have an annual

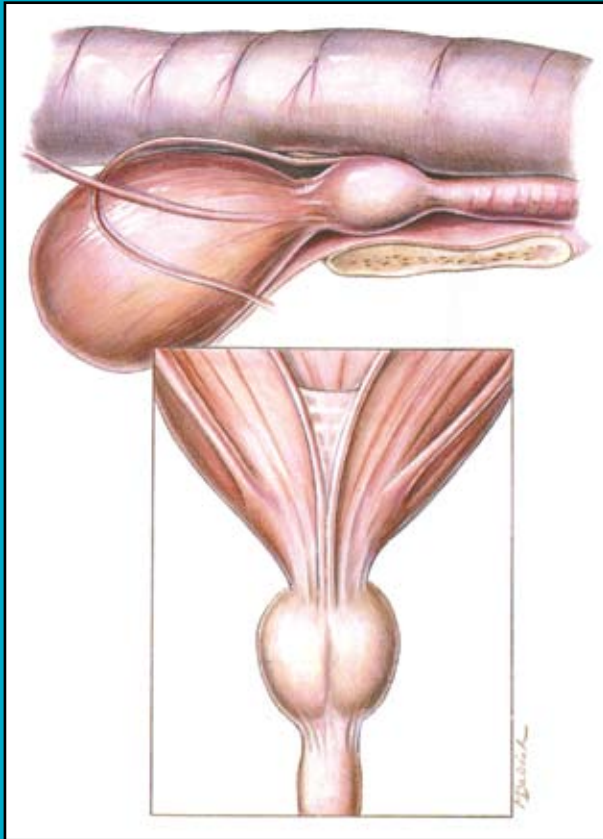
rectal exam from six years of age to monitor changes in the prostate. If the enlargement is symmetrical, the prostate has an even, firm feel and is not tender, and there are no symptoms, then no treatment is required.

Sometimes the presence of the enlarged prostate in the pelvic canal causes dogs to strain even when they are not constipated. This persistent straining, combined with weakening of the muscles around the rectum, can eventually lead to the development of a perineal hernia. This is seen as a bulge on one, and occasionally both, sides of the anus. These require major surgical correction.

Difficulty peeing, common in older men, is not often seen in dogs. A dribbling urinary incontinence is more common. Urinary tract infections are common, but are easily overlooked in male dogs because the main sign, frequent urination, is what they do a lot of anyway. With infection there is sometimes apparent discomfort while the dog is peeing and a more pungent smell to the urine. Pus may drip from the penis.

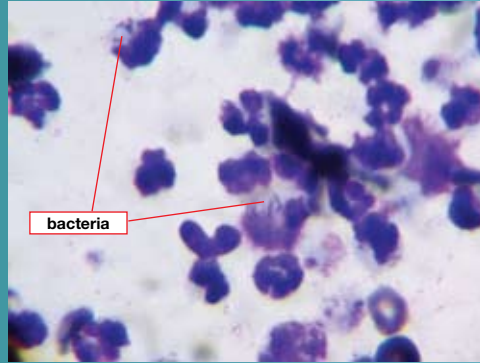
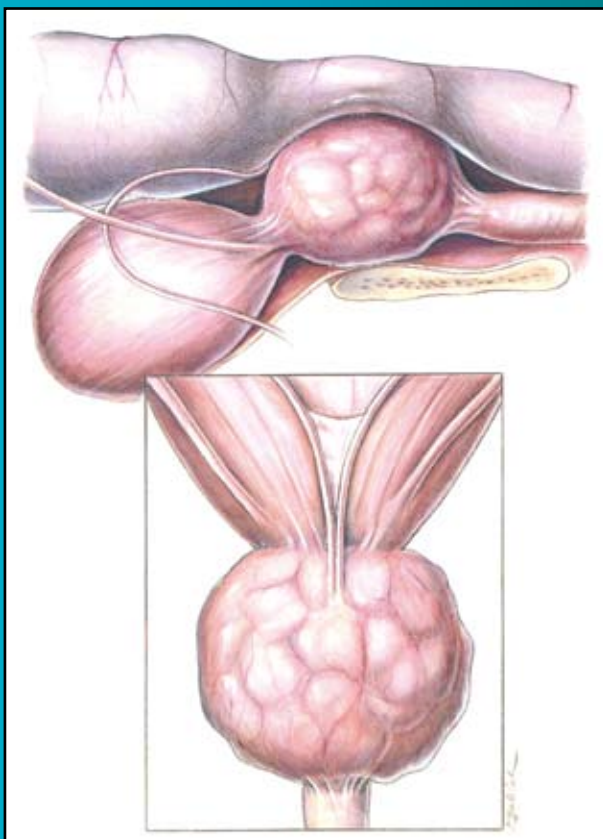
Occasionally the first sign of prostate disease is when a dog passes blood in its urine. There is sometimes an alarming amount passed.

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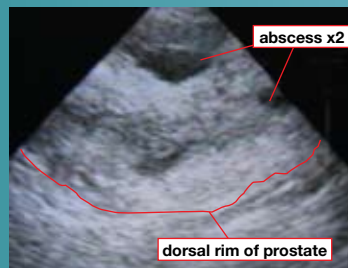


Above: Normal prostate gland.

Below: Benign prostatic hypertrophy - the most common prostate problem in dogs.



Above: Pus taken from Choco's prostate by fine needle aspiration and then stained shows white blood cells engulfing bacteria.



Left: Severe bacterial prostatitis with abscessation, as seen with ultrasound.

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The same set of symptoms may be seen when dogs develop squamous metaplasia of the prostate. This is also due to hormonal change. In this case oestrogen is produced by a special tumour of the testicles called Sertoli cell tumour. It causes marked thickening of the cellular lining of the prostate so that the glandular ducts block and very large cysts develop. The prostate may be the size of an orange.

These cysts, and the smaller ones of BPH, are prone to infection resulting in a prostatic abscess. Now the dog may have periods of fever and unwellness, and the prostate is usually painful. However, because the prostate is hidden away, these signs can be misinterpreted by owners as arthritis, back pain or 'getting old'. It is very important that dogs with these symptoms are checked out by your vet.

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Some dogs develop acute infections of the prostate without abscesses or cystic change. They are feverish, very ill and sore.

When it comes to treatment, castration is recommended as a baseline treatment for all prostate problems, except where the dog's breeding future is paramount. In those cases there is a range of testosterone-antagonist drugs which can be used. The prostate problems recur when these drugs are withdrawn. All prostate infections are potentially life-threatening and require

special antibiotics for several weeks. Abscesses must be drained surgically or by ultrasound guided needle aspiration. Large cysts require this needle drainage.

Cancer of the prostate

Although common in men, cancer of the prostate is blessedly rare in dogs. The signs are the same as for other prostate problems. Prostatic cancer is the only prostate problem to occur in castrated dogs. Prostatic adenocarcinoma is the most common form. It is highly malignant and no treatments have been found to be very successful. Transitional cell carcinoma sometimes invades the prostate. This often responds to a non-steroidal anti-inflammatory drug.

Choco's story - As bad as it gets!

It was dramatic! Choco jumped off the quad bike and then collapsed. Ernie Geeves and the family had been holidaying on the West Coast so they rushed Choco to the vet in Westport.

There Choco's severe shock was stabilised and he was referred on to Halifax Veterinary Centre in Nelson. An ultrasound scan, blood tests and tests on fluid from his abdomen quickly showed that Choco was suffering from septic peritonitis. A large prostatic abscess had burst when he had jumped from the quad bike.

Yet he had seemed perfectly normal till then, running and playing like a young dog, rather than the mature twelve year old that he was. As soon as Choco's septic shock was stabilised with IV fluids we operated on him. The pus had spread throughout his abdomen so it needed to be thoroughly rinsed out. The abscess cavity in his prostate was cleaned out and then filled with omentum. Omentum is the lacy, fat-filled membrane that cloaks many of the organs in the abdomen. It helps prevent the abscess re-establish. Then Choco was stitched up.

He was castrated too, so that the remaining prostate gland would shrivel up, and there would be no repeated problems. And there weren't! Choco went home to Christchurch, and lived happily till a stroke suddenly felled him last year.



Left: Choco in his element, loving the water & life!

Photos E. Geeves



Right: Choco riding with Ernie

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Preventing prostate problems

- ✦ If your dog is not going to be used for breeding, castration will prevent almost all prostate problems.
- ✦ After six years of age all entire male dogs should have an annual rectal exam to check their prostate
- ✦ Get your dog checked any time he shows signs of straining to poo or pee, pees more frequently, has smelly urine or blood in it, has dribbling urinary incontinence, or has hindquarter stiffness or soreness. Early diagnosis and treatment gives the best results.

Basic prostate facts

The prostate gland is a secondary sex gland of male dogs. The testicles are the primary sex gland and produce hormones and sperm. The prostate gland adds the bulk of the fluid that makes up the semen, helping to transport the sperm.

The prostate gland is shaped like a small walnut. It lies at the neck of the urinary bladder, wrapping around the urethra, the passage that takes urine out of the body via the penis.

Its activity is controlled by the male hormone testosterone. It is so dependent on testosterone that if the dog is castrated the gland wastes away, shrinking to a fraction of its size in just a few weeks. So prostate problems almost exclusively occur in entire (uncastrated) male dogs, and nearly always in older dogs.