

# POOR PERFORMANCE OR PROSTATIC PROBLEM?

by Joann Randall, DVM, DACT

**D**iseases of the canine prostate gland are problems frequently encountered in a small animal practice, especially in intact male dogs over the age of 6 years old. There are many causes of prostate disease, but this article will focus primarily on the most common disease affecting older, intact male dogs as it is these dogs in their prime that frequently start showing signs of poor performance in working trials, bite work, and decreased breeding libido.

Anatomically, the prostate is a bilobed gland in the male dog that encircles the urethra, or the tubular structure that leaves the bladder carrying urine. The urethra, carrying urine from the bladder, travels through the prostate gland after it leaves the bladder and then runs through the length of the penis. The importance of the anatomy of the prostate encircling the urethra will be discussed a bit later.

The function of the prostate gland is to produce a fluid which helps support and transport sperm during ejaculation. In the prepubertal male, the prostate gland is quite small and located farther forward in the abdominal cavity. It really serves no function until the male undergoes puberty.

As the male acquires sexual maturity and the testicles start producing testosterone, the prostate gland increases in size and reaches peak secretory function by about 4 years of age. After this time, due to continued testosterone exposure, the cells within the gland start to increase in the number of prostatic cells (called hyperplasia) and the size of the cells (called hypertrophy). This enlargement of the prostate gland is a normal aging process that occurs in intact male dogs and humans and is termed benign prostatic hypertrophy, benign prostatic hyperplasia, or BPH.

Benign prostatic hyperplasia is the most commonly diagnosed prostatic disease in the intact male dog. There is not a breed predilection for prostatic disease, but German Shepherd dogs and Dobermans seem to have an increased prevalence. It

has been shown that 50% of intact male dogs have microscopic evidence of BPH by 5 years of age and >95% are affected by 9 years of age.

Many dogs with BPH never show any symptoms, or none that are outwardly visible. As previously discussed, the urethra leaves the bladder and runs through the prostate gland. As the male ages and the prostate enlarges, the gland starts to press in on the urethra, making it more difficult for urine to pass through. The owner may notice that the dog takes longer to urinate, or strains. In extreme cases, the dog may even be unable to pass any urine at all.

Sometimes, due to hormone imbalances, the enlarged prostate gland starts to develop cysts. As these cysts grow, they may form channels emptying into the urethra and yellow, or slightly bloody, cystic fluid may be seen in the urine. Also, hypertrophied tissue within the gland often has an increased blood supply, which may lead to bright red blood dripping from the penis unassociated with urination. It is this blood noticed on the hairs at the end of the penis, or seen as bright red drops dripping on the floor that is the most common finding alerting owners that there is a problem.

Other symptoms of BPH are straining to pass a bowel movement due to pressure from the enlarged gland on the rectum, straining to urinate due to pressure from the enlarged prostate on the urethra, abdominal pain, and/or infertility.

There are many other prostatic diseases that can cause the same symptoms, such as infection of the prostate, large cysts, or prostatic cancer. Therefore, a complete diagnostic workup needs to be done to diagnose the problem properly. Initially, a physical exam is done including a rectal palpation to assess the prostate gland for size and consistency. Usually, dogs with BPH have uniformly enlarged prostate glands that are not painful when palpated. Sometimes, in large breed dogs, the gland is too far forward in the abdomen and not

able to be easily reached on the digital exam.

The best diagnostic tool available for assessing prostatic size and architecture is the ultrasound machine. An ultrasonic exam is a noninvasive and painless procedure done while the dog lies comfortably on a padded cushion. Prostatic cysts and BPH can be readily seen as well as tissue suspicious of cancer. To obtain a final diagnosis of the problem or check out a suspicious area, the dog can be mildly sedated and a biopsy of the prostate gland obtained.

The preferred treatment for dogs showing signs of BPH is castration since this quickly removes the testicles, or the source of the testosterone initiating the problem. After surgery, most male dogs are asymptomatic within 5-7 days and the prostate gland returns to a more normal size within 21 days.

In male dogs being used for stud, or bite work where higher levels of testosterone are needed for fertility or drive, drug supplementation can be safely administered to shrink down the size of the prostate gland without affecting the levels of testosterone needed for sperm counts or working drive. The most commonly used drug to decrease prostatic size is called finasteride (Proscar or Propecia). Once daily oral therapy is initiated, a reduction in prostatic size and subsequent clinical signs occurs within 4-6 weeks in most dogs. Other therapies used in humans, such as the herb saw palmetto, have not been shown to be effective in dogs with BPH. The use of estrogen or progesterone is not used in the male with BPH because of the potential for many undesirable side effects.

Remember that the most common signs seen with intact male dogs with benign prostatic hyperplasia are bright red blood dripping on the floor from the penis, straining to urinate or defecate, or infertility. But, often the symptoms are more subtle and the owner or handler will notice the dog's bite drive decreased,

decreased attention to tasks at hand, problems settling litters, or sub-normal performance in other areas of training.

Don't ignore poor performance—THINK PROSTATE and have your male checked out!

**Dr. Joann Randall, DVM, DACT**

Dr. Jo is a 1983 graduate from the University of Illinois. She practiced for 11 years in emergency medicine and critical care where she gained an interest in internal medicine. She has been in practice at the Animal Hospital of Woodstock since 1991 with a focus on reproduction and infertility.

In 2009, Dr. Jo completed a 6-year reproduction mentorship with the University of Illinois, College of Veterinary Medicine. In August, she passed the

specialty boards. She is now a diplomate in the American College of Theriogenologists, which is the specialty college dealing with reproduction and infertility.

She works with top breeders throughout the Midwest on all aspects of breeding programs, reproductive evaluations, pregnancy management, neonatal care and infertility disorders. Dr. Jo has broad experience in artificial and transcervical inseminations using fresh and chilled semen, and surgical inseminations using frozen semen.

Dr. Jo still maintains a strong interest in all areas of internal medicine. She enjoys hiking, camping, canoeing, horseback riding and all outdoor activities. Her two children are now in college, so she enjoys spending any spare time they have available with them!

