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The Other End of the Story

Anal Glands

What, where, why...the yucky stuff !

Natural Care for Arthritis What is Arthritis ? • Osteoarthritis is chronic degenerative joint disease. It is the cumulative effect of long term wear and tear on the joint structures, where the net effect of daily damage versus daily homoeostatic repair results in subtle long term degeneration. • Rheumatoid arthritis is an autoimmune disease, where the body produces auto-reactive antibodies that attack the joint structures and results in chronic long term inflammatory joint disease. The net result of rheumatoid arthritis is a similar pattern of chronic degenerative joint disease, but the degeneration can occur much faster, and be more severe. Why does it occur ? The typical joint has three main components 1. The articular cartilage (hyaline cartilage), which forms a smooth, shock absorbing layer over the end of the bone. It is comprised of cells called chondrocytes. 2. The joint fluid, a thick, viscous layer of fluid that separates the two cartilaginous joint ends. It provides lubrication for the joint, acts as a shock absorber, and also feeds the chondrocytes that make up the cartilage surface. 3. The synovial membrane and joint capsule, which is firmly attached to all the bones of the joint, and forms a complete capsule that contains the cartilage ends and joint fluid. The outer surface of the joint capsule is made of tough elastic fibrous tissue, and often contains, or is confluent with, the ligaments of the joint. The inner surface is the synovial membrane, a layer of cells that manufactures the joint fluid and feeds the joint tissues. During the normal course of activity, the joint undergoes concussive forces on a constant basis. Most of the energy of the force is absorbed by the joint capsule, joint fluid and cartilage layer, and this can result in micro damage to the chondrocytes and synovial cells. The damaged cells release inflammatory enzymes (Cyclo-oxygenases etc), which stimulates the inherent repair mechanisms of the body, resulting in increased blood supply to the joint, and an inflow of immunomodulatory cells that repair the damage. This process occurs constantly in the normal healthy joint on a daily basis. With the normal ageing process, repair mechanisms in the body begin to slow down, or fail, and nutrient uptake from the intestines is impaired. The combined effect of loss of nutrients required for repair, and diminished repair mechanisms, is degeneration (degenerative disease).



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What happens then ?

Recurring anal gland blockage is also increasingly common. As a general rule, it is relatively easy for you vet to diagnose, and may often be noticed during a routine check up or vaccination. Expressing, or unblocking, the gland(s) is an unpleasant job, for both dog, owner, and veterinarian. It is achieved by physically squeezing the glands, either externally, or per rectum, and manually removing the secretion build up. It can be quite painful for the dog, if the glands are very blocked, or infected. And the smell...aaaagh !!it doesn't get much worse, and I've smelt some pretty bad things, as a vet!

Once the glands have been expressed, the signs of irritation will usually disappear quickly, unless they are all ready infected. But it is unfortunately common that they can be blocked and full again within months. If infection has occurred, there can be permanent changes and scarring of the gland and ducts, that can prevent normal emptying. These dogs end up with chronic anal gland problems, and can be regular visitors to the vet clinic.

Chronic blockage and infection

If your dog has developed chronic infection and / or blockage of the anal glands, there are only a few alternatives. A normal course of antibiotics does little to clear up anal gland infections, because the gland has very little blood supply, and the source of the infection (the secretion) is constant.

Your vet may offer to flush out the anal glands, under sedation or anaesthetic, and implant an antibiotic directly into the glands. This can work about 50% of the time. If it doesn't work, or the problem is obviously too severe, then the only other choice is to surgically remove the glands. This procedure is not easy, and not without potential complications.

To remove the glands under surgical anaesthesia, first they are emptied, and then filled with a quick set gel, via the ducts. They are then carefully dissected out, using the gel to outline the gland. Leaving even a small piece of glandular tissue can result in ongoing problems. Also, due to their proximity to the anal sphincter muscle, any damage to this muscle during surgery, can result in ongoing faecal incontinence, which is obviously disastrous.

So what is the answer ?

Like most diseases, prevention is better than cure. But even for the badly affected dogs out there, there are a few simple tricks that can help enormously. The key to correcting anal gland dysfunction, is to understand what is going wrong. The principle cause of dysfunction is improper emptying of the glands. It is a lack of stimulation to the glands, to fully empty. This, quite simply, is caused by a lack of faecal bulk. Without correct faecal bulk, the anal sphincter muscle is not stretched, and the glands are not forced to empty.



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This lack of faecal bulk has been caused by two major changes to the average domestic dog's lifestyle. Firstly, the confinement of modern dogs, to the average back yard, has significantly reduced the normal roaming and scavenging habits of dogs. A wild dog will eat an incredible range of indigestible material every day, including bark, wood, vegetation, clay and soil, feathers and fur, bones...etc. A vast amount of this material is passed by the dog in its daily faeces. The resultant faecal motions are large and firm, and cause full stretching of the anal sphincter, and complete anal gland emptying. The second major change to modern dogs has been the introduction of commercial pet foods. These processed diets are extremely low in residual faecal bulk and consistency (most readers I am sure, can relate to a tin of food going in, and coming, out looking the same). In fact, many premium dog foods are designed specifically to reduce faecal volume...how convenient. But at what price?

It is precisely this lack of stool bulk, normally provided by a dog's natural scavenging habits, and raw food diet, that is resulting in the anal gland epidemic we face today in veterinary medicine.

So the simplest answer to correcting anal gland dysfunction is to replace faecal bulk. Raw bones provide an excellent natural source of faecal bulking. The digestion of raw bones produces those characteristic hard "white" dog motions you often see. If you feed bones every other day, your dogs are extremely unlikely to get anal gland problems. The other very simple form of faecal bulk I use, is whole grain oats. Whole oats are indigestible, and will pass through a dog's digestive tract and appear in the faeces intact. Adding a tablespoon of whole oats (husk and all) to any soft food diet, will create good firm stools at the other end. The end result, pardon the pun, will be normal functioning anal glands.

Flatulence

A basic understanding

Primarily it is important to make clear that flatulence is a perfectly normal function of digestion. Flatulence, or colonic gas formation, is a result of normal bacterial fermentation in the large bowel (colon). Normal healthy animals have a large population of "good bacteria", called pro-biotics, that exist in the colon, and live on (ferment) faecal matter in the bowel. As a result of the fermentation, they produce essential vitamins that are absorbed back into the animals system. Naturally flatulence is not much of an issue if your dog lives outside, but it can become a distinct problem with indoor pets, or on a long car journey



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Excessive flatulence

As a general rule, colonic bacteria feeding on carbohydrate, produce a non-smelly gas, whereas those that ferment proteins, especially cooked meat protein, will produce sulphur dioxide gas (the classic rotten egg gas). So the type and volume of gas produced is due to a combination of dietary ingredients, and the relative ratios of the different types of colonic bacteria. An excess of gas formation is due to an imbalance in the levels of colonic bacteria. Certain food groups will favour the development of "putrefactive" bacteria (smelly gas forming bacteria), which includes beans, dairy products, cooked meat, and certain vegetables (cabbage, broccoli, potatoe), all of which may be found in the ingredients of many commercial pet foods.

What can you do ?

Conventional treatment for excessive flatulence has been to give activated charcoal (powder or tablets) to absorb the gas. However, recent cancer research has shown all charcoals to be highly carcinogenic, and as such, it can no longer be recommended.

I generally advise switching your pet to a natural raw diet, and experimenting with the ingredients to get a good match. Also, repopulating the bowel using a pro-biotic supplement (live culture yoghurt, or more recently, a specific veterinary pro-biotic called Protexin), can be very effective. There are also a few natural ingredients that can lessen smelly flatulence, like raw garlic, fennel, aniseed, ginger, or peppermint oil.

Incontinence

What is it ?

Strictly speaking, incontinence is unconscious and involuntary urination or urine leakage. It is most common in older (8 years +) desexed female dogs, but can occasionally occur at a much younger age. It is rare in male dogs, and rarer still in cats. It generally starts with nocturia (bed wetting at night, whilst asleep), but can progress to day time dribbling as well.

Why does it happen ?

A vast majority of incontinence in dogs is due to hormonal deficiency. There is a natural decline in the female hormone oestrogen, with ageing, that is linked to incontinence in many species. In dogs, this process is accelerated by the desexing operation (speying), that includes removing the ovaries, the body's main source of oestrogen. The deficiency of oestrogen causes atrophy (weakening) of the neck of the bladder, and associated urethral structures, that normally keep the bladder closed, and results in urine leakage.



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Is it dangerous ?

Incontinence is primarily a mess / hygiene problem for indoor pets, and their owners. I certainly believe that many dogs also display signs of emotional stress or “embarrassment” at soiling inside, when they have previously been able to “hold on all night”. Medically speaking, constant urine leakage can result in urine scalding of the skin around the vulva, and lead to secondary skin infection. Infection in this area, combined with a weakened bladder neck, can also increase the risk of cystitis (bladder infection).

Treatment

Conventional treatment for incontinence involves hormone replacement therapy, using a low dose of oestrogen (Stilboestrol tablets) once or twice weekly. The doses required to control incontinence in dogs are very small though, nothing like HRT in humans. This works very well for most bitches, and has no known side effects at the required doses. Another treatment, generally only used if oestrogen has failed, is pseudoephedrine (Sudofed). It can be quite effective, but does have the same side effects of Sudofed tablets in people, which include increased heart rate, agitation, and restlessness.

Natural alternatives include oestrogenic herbs, like red clover and chaste tree, or you can get good results with acupuncture.

Given that it is caused by oestrogen deficiency, the inquiring mind will be wondering why the vet simply doesn't leave the ovary intact, when the bitch is desexed. Unfortunately, the long term problems that result from leaving ovaries intact, which include the bitch still coming into season every 6 months, plus ovarian and mammary cancers, have outweighed the lesser problems caused by their removal.

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