



So what happens when your beloved canine friend does not want to go for his walk anymore because he is too sore the next morning?

Unfortunately older pets, and these days even puppies, get afflicted by a condition commonly known as joint disease. This is the same problem we as humans suffer from as well, better known as arthritis. In dogs and cats and more commonly in larger breed dogs, it is concentrated in the hip, knee, shoulder and elbow joints. The spinal column and back vertebrae (back bones) can also be affected.

Arthritis (joint inflammation) happens when the cartilage that surrounds the end of the bones, (a white, glistening and very smooth surface that make the joints glide easily) becomes eroded due to various factors, resulting in bone grinding on bone. The most common cause of arthritis in dogs and cats is old age, as the normal degenerative aging process takes its toll. Arthritis is an extremely painful condition which causes the signs like difficult walking and slowing down in general we see in our pets. It gets even worse where the body tries to repair the damage at certain stress points of the joint and new bone growth takes place, which deforms the bones and joints. This process of gradual deterioration is called degenerative joints disease and progresses over a period of time. The deterioration cannot be stopped or cured; it can only be delayed with treatment, diet or surgery.

Large breed dogs tend to be more afflicted with arthritis. Numerous factors predispose pets from getting this condition including:

- breeds with bent legs such as the English Bulldog and Basset Hound
- large breed puppies that grow too fast or puppies that do not receive the correct nutrition whilst growing
- over-exercising your puppy whilst still growing
- inherited conditions (bad genes from the parents)
- trauma to the bones, ligaments or joints
- obesity (most common)

Hip and elbow dysplasia (the incorrect fitting and/or growth of the joint) in puppies can be diagnosed and treated effectively as early as the age of 4 months. When hip and elbow dysplasia get left untreated, the dog will suffer from arthritis in the later stages of his life. Not all dogs that develop elbow or hip dysplasia show signs of having such a condition and therefore it is not always possible to diagnose the condition early enough so that steps can be taken to delay the early progression to arthritis. The most common symptom of arthritis seen in puppies and dogs are limping and lameness, not taking proper weight on the leg.

So how do you know if your pet may be suffering from this condition?

Usually it starts with signs of your pet being sore and stiff after going for a walk or a run. They may not even want to take weight on a certain leg. Older animals will have difficulty in getting up, especially after sleeping for a while, and they may tend to slip easily on slippery floors. Animals suffering from arthritis do not run or jump as they used to, and may not want to climb the stairs anymore. Sitting down for a treat becomes difficult and you may see that your dog may have difficulty to squat to pass a stool or urinate. If you manipulate the affected joint by bending the legs, you may hear a creaking sound or feel something like rubbing sand between your fingers, also called

crepitus. If your animal shows any of these signs it will be worthwhile to take your pet for a visit to the vet.

Arthritis in cats are exactly the same as in dogs, however vets do not diagnose it as frequently as in dogs. The main reason for this is that cats are exceptionally good at masking pain and even if they suffer great pain it will often go unnoticed till very late in the progression of the disease. Cats are also often so stressed during veterinary consultations that normal movement cannot be differentiated from abnormal movement. Even though cats are much lighter than dogs and the wear and tear on their joints is significantly lower as a result of carrying a much smaller body mass, studies have shown that 65% of cats over 12 years are affected by feline osteoarthritis. Cats tend to be more active at night (nocturnal behavior) and lameness and limping often go unnoticed for this reason. The owner simply does not see them moving around as much. Symptoms which may indicate arthritis in cats can be:

- inappropriate urination in the house, seeing as they cannot jump so high anymore to go outside through an open window
- not eating when their feeding bowl is up on a counter, or
- staying in one spot for longer periods of time.

So how do vets know that an animal has arthritis and it isn't just a sprained muscle?

The vet will start with a proper examination including feeling and manipulating the joints of the front and back legs, moving the head from side to side and up and down and placing pressure on the spine from head to tail. A patient that cannot bend a knee or that has a joint which creaks whilst being manipulated is more likely to suffer from arthritis than having just a muscle sprain. A definitive diagnosis of dysplasia and arthritis can only be made by taking an x-ray of your pet. This may show how the joint is malformed and/or where the new bone growth and arthritic changes are taking place. Sometimes in the early stages of the condition this is not clear on the radiograph and the vet can then take a sample of the fluid that surrounds the joint and analyse it microscopically to see if there is any sign of inflammation.

**Normal hip**



**Arthritis hip**



In part two on Arthritis we look at the treatment and prevention of this debilitating condition.