

## DEGENERATIVE JOINT DISEASE

As our pets age, the tissues lining the bones and joints may deteriorate and degenerate. Degenerative Joint Disease (DJD) describes chronic arthritis (osteoarthritis) which is a gradual deterioration of articular cartilage within the joints.

### *What is DJD?*

Joints consist of a tough fibrous joint capsule joining the bones. The joint capsule is lined by a thin membrane which produces joint fluid. This acts as a lubricant and also carries nourishment to the spongy articular cartilage which covers the ends of the bones. The articular cartilage does not have any blood supply of its own to provide nourishment and oxygen. The articular cartilage receives nourishment from small vessels in the underlying bone and through absorption from the joint fluid.

DJD can follow a number of joint diseases including infection and surgery. It also occurs from excessive weight and obesity. This smooth resilient cartilage degenerates and becomes brittle and may actually split from the bone and become detached within the joint.

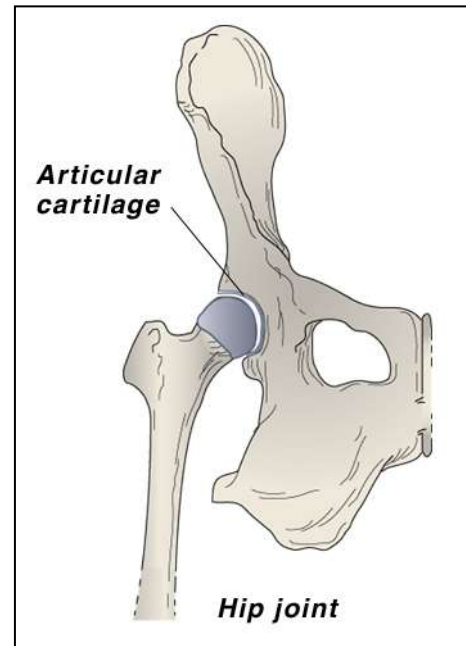
Although DJD is said to be non-inflammatory, mild inflammation plays a part in causing clinical signs. The damaged cells of the cartilage release substances which result in inflammation, pain and further damage to the cartilage. Thus, once DJD begins it can become a vicious cycle.

In addition to a physical examination, **diagnosis** usually requires x-rays (taken under a short anaesthetic) to look for the underlying cause ( e.g. trauma, infection, etc.) and in some cases more advanced imaging techniques maybe recommended. Radiographs may also need to be repeated to assess the healing or deterioration of a joint.

### *Can the condition be cured?*

Most of the damage caused by DJD is irreversible. Fortunately, new products are available that can slow the progress of the disease and promote cartilage healing. In addition, modern analgesics can effectively control pain without few side effects.

We will discuss treatment options to allow your pet to enjoy a happy, pain free life.



### ***Control of DJD***

Many dogs suffering from DJD are overweight. It is imperative that your pet's weight should be monitored and reduced if necessary. If you have any difficulties or need help, please contact us. There are many weight reducing diets available that **work very well**.

Regular gentle exercise (walking, swimming) can aid in maintaining mobility and muscle tone. It is important not to over do it. Most pets with DJD cope better with regular short periods of exercise (e.g. a 10 minute walk daily rather than a half an hour walk every week). There are qualified animal Physiotherapists we can refer you to, to help rebuild and maintain muscle mass.

### ***Effective pain relief***

Many of the early analgesics caused gastrointestinal upset. Today's modern arthritis medications have few of these side effects but some pets are more sensitive to certain drugs than others. The most common side-effects of analgesics include decreased appetite, vomiting and diarrhea. Most pets will have pre-medication blood tests to make sure that they can safely metabolize and excrete the medication and then periodic blood tests to ensure continued safe usage. If you have any concerns following the administration of any medication we have prescribed, please discontinue them and contact us immediately.

### ***Slowing destruction of cartilage and promoting repair***

Drugs are now available which have been shown to be effective in controlling the destruction of cartilage in dogs with DJD. They work by:

- improving the blood supply within the joint
- preventing some of the harmful enzymes that continue the destruction of cartilage within the joint once it has started
- promote the formation of fibrous tissue to heal damaged areas
- promote cartilage repair

These drugs are usually given as weekly injections for 4 weeks with improvement usually seen after the third injection. The effect may last 3-6 months after which the course may be repeated.

### ***Diet supplements***

There are certain products that are described as nutritional supplements rather than pharmaceuticals, (i.e. drugs). These products have been termed *nutraceuticals*. These compounds often contain glucosamine (glycosaminoglycan), chondroitin, omega 3 fatty acids, trace elements and vitamins. Studies have shown that these products can help in promoting joint health by promoting the production of joint fluid, reducing cartilage breakdown, promoting cartilage repair and having an anti-inflammatory effect.

If you have any questions or concerns regarding treatment, please do not hesitate to contact us.

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