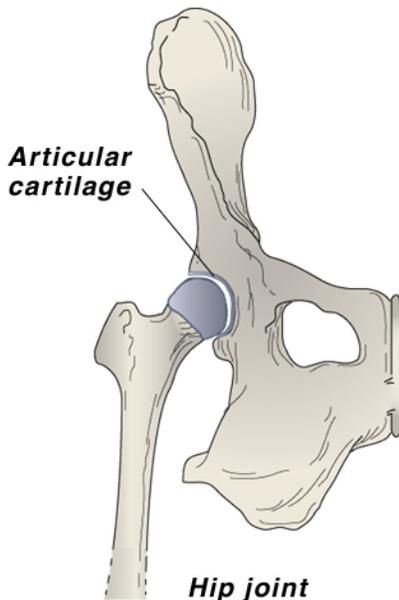


Degenerative Joint Disease and Osteoarthritis

As our dogs and cats age, the tissues covering and lining the bones and joints may deteriorate and degenerate. Degenerative Joint Disease (DJD) and osteoarthritis (OA) describes chronic arthritis or 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 fluid 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 may follow 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.

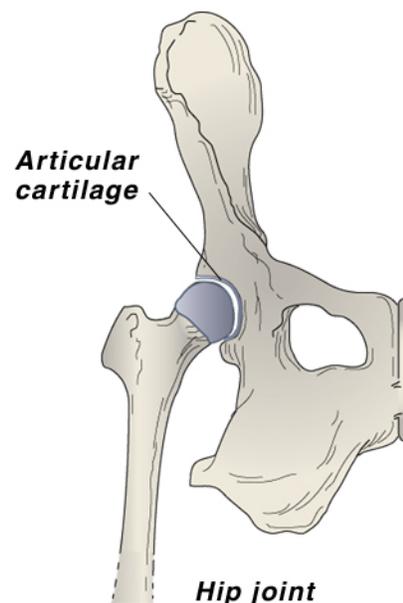
In DJD/OA inflammation plays a part in causing clinical signs. The damaged cells of the cartilage release substances which result in inflammation, pain and further damage to the cartilage. Thus, once DJD begins it can become a vicious, progressively worsening cycle.

What is arthritis?

Arthritis is a complex condition involving inflammation of one or more joints. There are many causes of arthritis in pets. In most cases, the degree of arthritis varies from animal to animal.

What causes arthritis?

Arthritis can be classified as **primary arthritis** such as rheumatoid arthritis which occurs as a result of joint instability that leads to bone erosion. Secondary arthritis is the most common type of arthritis in pets. The most common type of arthritis is osteoarthritis (also known as degenerative joint disease (DJD)). Some common causes include hip or elbow dysplasia, obesity, and cranial cruciate ligament tears.



Other causes include joint infection, often as the result of bites or following joint trauma and damage.

Rheumatoid arthritis is an immune mediated, erosive, inflammatory condition. Cartilage and bone are eroded within affected joints and the condition can progress to complete joint fixation (ankylosis). It may affect single joints or multiple joints may be involved (polyarthritis). In certain



dog breeds Rheumatoid Arthritis (RA) factors can be detected with blood tests. Other types of immune mediated arthritis can be non-erosive, such as arthritis that is associated with Systemic Lupus Erythematosus (SLE). SLE is often accompanied by other clinical signs in addition to the arthritis.

Infective or septic arthritis can be caused by a variety of microorganisms, such as bacteria, viruses and fungi. Septic arthritis normally only affects a single joint and the condition results in swelling, fever, heat and pain in the joint. With septic arthritis, your pet is likely to stop eating and become depressed.

Can DJD or arthritis conditions be cured?

Most of the damage caused by DJD and arthritis 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.

Control of DJD – Weight Reduction

Many dogs and cats suffering from DJD are overweight. It is imperative that your pet's weight should be monitored and reduced if necessary. **THERE IS NOTHING MORE IMPORTANT IN THE CONTROL AND TREATMENT OF OA/DJD THAN ACHIEVING AN IDEAL, LEAN BODY CONDITION!!!** If you have any difficulties or need help, please contact your veterinarian. There are many weight reducing diets available that work very well. No treatments, surgery or drugs will be as effective as maintaining an ideal body weight and condition!!!

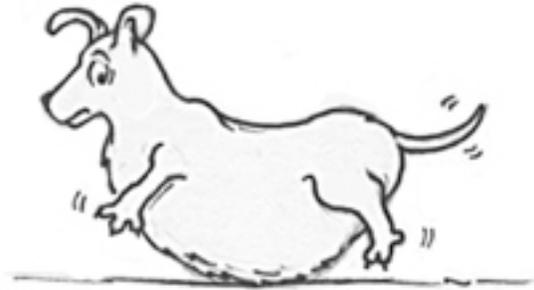
Effective pain relief

Many of the early analgesics caused gastrointestinal upset. Recent advances mean that modern arthritis medications have few of these side effects. If you think your pet's medication is causing side effects, please discontinue its use and contact your veterinarian. Pay close attention to administering the proper dose, especially in cats (**NEVER GIVE CATS TYLENOL OR OTHER PRODUCTS WITH ACETOMINOPHEN !!!**)

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



Diet supplements

There are certain products that are described as nutritional supplements rather than pharmaceuticals, (i.e. drugs). These products have been termed *nutraceuticals* or DMOADS (disease modifying osteoarthritic drugs and supplements). These compounds often contain MSN, glucosamine (a glycosaminoglycan) and chondroitin sulfate, along with other trace elements and vitamins. There are anecdotal case histories that suggest these products are beneficial, and it has been shown that they cause no side effects. They generally work best during early stages of disease, and we advise clients to use them for at least 60 days before making a judgement on their effectiveness. A daily fish oil capsule (750 – 1500mg) may be equally beneficial. It is important to purchase these products from a reputable source as the US Food and Drug Administration does NOT monitor the production or quality of these products. There is also prescription diets with high quality supplements added to the diet. See our staff for recommendations.

Exercise

OA/DJD results in a progressive breakdown of the structural component of the musculoskeletal system: the bones and joints. Therefore, it is very important to maintain fit muscles as your dog is depending on the muscles to support the bones and joints. Sadly, the old adage “use it or lose it” is very true for muscles. If your pet is sore or painful and not exercising then the muscles rapidly deteriorate and atrophy making the underlying OA/DJD worse. Long walks, swimming if possible, walking in sand or tall grass will all help to improve muscle tone (If you exercise with your dog it may make you feel better too!) Our staff can help you design a specific exercise and rehab plan for your pet. For more options on rehabilitation we encourage you to visit <http://www.vcaspecialtyvets.com/south-carolina-surgery/departments-doctors/departments/rehabilitation>

If you have any questions or concerns regarding treatment, please contact Grace Animal Hospital at (803) 808-7387 or visit www.gracepets.com.

OTHER INSTRUCTIONS: