

Degenerative Joint Disease (DJD)

Definition

Degenerative joint disease (DJD) is a term used to describe a complex degenerative condition of a joint involving both skeletal and soft tissue elements. It refers to a condition where there is loss or degradation of articular cartilage, irregular bone formation around joints (osteophytes) and severe thickening of the joint capsule (soft tissues surrounding the joint). Dogs develop DJD secondary to an underlying joint problem such as hip dysplasia, osteochondritis dissecans (OCD), fragmented medial coronoid process (FMCP), cranial cruciate ligament (CCL) rupture, immune mediated disease or traumatic injury. This thickening and / or mineralization of joint components is one of the body's methods of stabilizing an unstable joint. Once DJD has been initiated, it is always progressive regardless of treatment and whether or not the underlying condition has been taken care of. Depending on the underlying disease process, surgical stabilization of an unstable joint in addition to medication may be necessary to reduce or eliminated the cause of lameness. The long-term management goal is to greatly slow the rate of joint degeneration and progression of osteoarthritis and to improve patients' comfort and long-term quality of life.

Diagnosis

The diagnosis is typically made by a combination of demonstrating osteoarthritis (OA) on x-rays and feeling a thickened, painful joint with a limited range of motion during physical exam.

Treatment / management

The long-term management goal is to minimize as many of the factors that increase joint inflammation as possible. Below is a brief list of items that can be improved to minimize chronic joint insult:

1. Keep or get the patient to an ideal body condition score: 5/9 on a 1 to 9 scale where 1 is severely emaciated and 9 is severely obese. You should be able to feel a patient's ribs, but not see them. Patients should have a distinct waste line with no underbelly fat.
2. Avoid activities that repetitively incite lameness. Lameness is a sign that there is a spike in inflammation, which if chronically left untreated causes rapid degradation of joint components especially articular cartilage. It's important, though, to keep arthritic patients active to help maintain muscle mass and joint health. Shorter more frequent walks are always better than rare longer walks. Swimming and formal PT options are also recommended.
3. Daily supplementation with chondroprotective agents (glucosamine-chondroitin containing products) is recommended to keep background inflammation down. As these are not regulated always look for *guaranteed analysis* on the label and consult with a veterinarian regarding which brands are quality products. Daily omega-3 fatty acids (fish oils) are also recommended.
4. Use of a non-steroidal anti-inflammatory (NSAID) medication such as Previcox or Rimadyl is recommended for days when there is lameness and /or an inflammation flare-up.