

## **Osteoarthritis (OA)**

Osteoarthritis (OA), also referred to as degenerative joint disease (DJD), is a disease of joints characterized by the deterioration of the (articular) joint cartilage and changes in the bone and soft tissues of the affected joints. The exact mechanism of how OA develops is unclear; however, derangement in the articular cartilage matrix is a central component of joints affected by OA. The complaint of most clients is that their horse is not performing as well and/or seems lame.

Osteoarthritis affects the soft tissues surrounding the joint. Therefore, there are multiple sources and degrees of pain that can affect each horse differently. An increased volume of synovial fluid in the joint (joint effusion) can cause increased pain due to stretching of the joint capsule. Fibrosis of the joint capsule and ligaments can cause decreased range of motion and pain in the affected joint. The pain ultimately results in discomfort and lameness causing poor performance.

Diagnosis of osteoarthritis can be established by radiography of the affected joint. Common radiographic findings include new bone production at the joint surface (osteophytes or bone spurs), increased opacity of the subchondral bone (the bone beneath the affected articular cartilage), and decreased joint space. Treatment of osteoarthritis consists of two goals. The first goal is symptomatic treatment to relieve the pain associated with the negative changes of the affected joint. The second goal is to retard the progression of osteoarthritic changes.

Treatments range from very conservative to quite aggressive. The decision on the type of treatment varies depending on the severity of the disease, the joint affected, the expected performance of the horse, and financial constraints involved.

Conservative treatments include oral supplements of glucosamine and chondroitin sulfate. There are also intramuscular and intravenous therapies that contain substances that help lubricate the joint and provide viscosity to the joint fluid. A more aggressive, yet common, therapy is joint injections with hyaluronic acid and/or corticosteroids. There are risks associated with joint injections including an inflammatory response in the joint or developing an infection in the joint. The most aggressive therapy is surgical arthrodesis (fusion) of the affected joint.

If you suspect that your horse has osteoarthritis, it is best to have your veterinarian evaluate your horse and perform a lameness examination and the necessary diagnostic tests. From there, it can be decided what the best therapeutic options are for your horse.

Contact Brandon Equine Medical Center at 813-643-7177 or email [info@brandonequine.com](mailto:info@brandonequine.com) with any questions regarding this topic.