What Is It?

Osteoarthritis (OA) is a common disease (generally among middle-aged to older dogs) that can cause pain and decreased quality of life. OA results from the deterioration/disruption of normal joint cartilage which leads to inflammation, pain, and loss of range of motion in the affected joint(s). Previous trauma, poor anatomy (hip dysplasia), obesity, and the normal wear and tear of aging are some of the most common causes. Cartilage (the smooth tissue between joints) provides a cushioning, frictionless surface for joint motion. Decreased or damaged cartilage leads to increased friction in the joint. Increased friction leads to inflammation and formation of tiny spur-like bony growths that cause pain with movement. Eventually, the cartilage wears away completely, resulting in bone-on-bone friction and severe degenerative changes. Because bone has a rich nerve supply, this friction results in pain and decreased function. The hips, elbows, knees and the spine are most commonly affected.

Diagnosis

The initial diagnosis of OA is generally based on the history of the symptoms noticed at home and a thorough physical examination by your veterinarian. Further assessment through a sedated physical exam, x-rays, consultation with an orthopedic specialist, scoping of joints (arthroscopy) and advanced imaging (CT, MRI etc.) also may be recommended. Determination, if possible, of the underlying causes, affected areas of the body, and severity of the OA helps in designing the best treatment plan for your dog. It is important to rule out other possible or concurrent causes of arthritis (such as Lyme disease) or referred pain from another area of the body that can mimic the symptoms of OA. Response-to-therapy can also provide useful information in the diagnosis of OA.

Prognosis

OA does not necessarily shorten the canine lifespan directly. However, the pain, decrease in quality of life, and symptoms that can occur (such as the inability to control bowel function) can lead to a shortened life, or a long but painful and anxious life. Multi-modal treatment and environmental modification can provide the needed management to live a relatively comfortable, active, and content life. It is important to talk to your veterinarian regarding the best treatment protocol for your pet that is reasonable and tolerable for their individual situation.

Treatment and Management

The goals of treatment are to manage the cause(s) of arthritis, provide relief from pain and inflammation, and slow the progression and deterioration of the joints. Generally, treatment of arthritis/chronic pain is most successful with a multi-modal approach. Corrective surgery (if possible) can help to reduce pain, slow arthritic changes, and increase quality of life. It may also be used in conjunction with a comprehensive treatment plan to help palliate the symptoms of OA. An example of a basic treatment plan may include NSAID’s (non-steroidal anti-inflammatory drugs) to decrease inflammation, opioids to control pain, supplements to support cartilage health, proper nutrition to maintain a healthy weight, and alternative and/or physical therapy to increase
of life. Environmental modification (such as providing ramps and improved traction on slippery surfaces) and mobility aids (like harnesses and slings) can help provide further personalized management. Alternative therapies including acupuncture, therapeutic ultrasound, water therapy, massage, cold laser therapy, and emerging options such as stem cell therapy provide non-invasive options to use in addition to other modalities.

Management Tips

Consider providing:

- Easily accessible food and water dishes
- Ramps/stairs to common areas
- Access to “safe” quiet areas
- Warm, soft sleeping beds
- Modified surfaces to increase traction on tile, cement or hard wood floors
- Enhanced lighting at night
- Doggie diapers for incontinent pets
- Puppy pads if your dog can’t get outside
- Creative stimulation that does not require strenuous activity
- Mobility aids such as slings and harnesses
- Safe options to reduce anxiety such as pheromone collars and thunder shirts

Try to:

- Practice gentle handling
- Limit stress (noise, kids, other animals)
- Trim nails regularly
- Groom or have your dog groomed
- Provide a harness that minimizes stress
- Manage weight with a proper diet
- Let your pet determine their level of activity
- Encourage gentle activity every day to decrease muscle loss and stiffness
- Let others that may interact with your dog know of the condition
- Provide low calorie treat options such as green beans or carrots
- Use quality of life calendars to track the progression of the disease

Before OA becomes unmanageable, it is important to begin palliative care discussions with your veterinarian. Do not assume your dog is slowing down simply due to old age. Many dogs (despite the pain from OA) will continue to eat, drink, run/play, and maintain much of their normal personality.