<u>Osteoarthritis</u> - a progressive disorder of the joints caused by gradual loss of cartilage and resulting in the development of bony spurs and cysts at the margins of the joints.

**Synonyms:** Degenerative joint disease (DJD), degenerative disc disease, arthritis (general), spondylosis (back and neck).

**Symptoms**: Joint pain due to osteoarthritis is usually dull, achy, and generalized. However, certain movements may make pain sharp. Morning stiffness is common but typically resolves within 30-60 minutes. Pain generally increases with use of the joint and is relieved with rest. Joint enlargement is common. Crepitis, or the feeling of "crunching" in the joint, is often present. The most frequently affected joints are the hips, knees, low back and neck, as well as the middle and end joints of the fingers.

## How is it diagnosed?

A thorough patient history and physical examination can lead towards the diagnosis of osteoarthritis. X-ray is confirmatory.

## How is it treated?

Osteoarthritis is a complex mechanical and physiological process. Genetics play a role, as well does past injuries.

- The goal of treatment is to halt degeneration and relieve symptoms, not re-grow cartilage.
- Topical analgesics offer relief to many. Of special interest is Capsaicin creams.
- Unlike most musculoskeletal injuries, patients suffering from osteoarthritis do well with heat modalities. Ice should be used for flare-ups (see additional handouts).
- Several natural anti-inflammatory supplements are available. Ask your doctor for more details.
- An anti-inflammatory diet combined with a safe and effective exercise routine is the most effective way to manage osteoarthritis in the long term.

Diets higher in essential fatty acids, fiber, magnesium, carotenoids, and flavonoids have shown to decrease markers of inflammation and reduce requirements for medications. The role of exercise in DJD is to have you engage in the proper type of therapeutic exercises to help prevent deformities, decrease stiffness, and maintain range of motion and strength.

- "Flare-ups" can be managed using multiple therapeutic modalities, such as: electrical muscle stimulation, ultrasound, low level laser therapy, massage, and joint mobilization/manipulation.

## Alternative treatments.

NSAID's, muscle relaxants, narcotic pain relievers, steroid injections, joint fusions (surgery), joint replacement (surgery).

**Prognosis** is good for symptomatic relief. The amount of relief attainable largely depends on the degree of joint degeneration present.

**Duration of care:** Approximately 3 timers per week for 4 weeks for a total of 12 visits in the first month. The treatment plan varies greatly depending on the degree of osteoarthritis present, overall health, and compliance to at home self-care instructions.