Degenerative Joint Disease

**Condition:** Degenerative joint disease, also known as osteoarthritis (OA), is a common “wear and tear” disease. The underlying cause of this condition is typically chronic repetitive motion that results in inflammation and structural joint damage. Inflammation causes pain, redness, and swelling. The tiniest amount of trauma triggers inflammation as the body attempts to clean-up/protect damaged tissue. This cycle of joint damage and inflammation leads to the breakdown of cartilage that serves as a smooth gliding surface and cushion in the joints. Any joint can be affected, but frequently found in the knees, hands, hips, and spine.

**Background:** More than 50% of adults over the age of 65 are affected by degenerative joint disease. This condition is associated with pain, loss of function, and reduced endurance, ultimately leading to weight gain and associated complications.

**Risk Factors:** Predisposing factors include repetitive motion, infection, rheumatoid arthritis, post-joint trauma, muscular dystrophy, osteoporosis, hormone disorders, obesity, sickle cell disease, and bone disorders. OA equally occurs in men and women before age 55 but increases in women after that. Knee OA is more common in African American women. Higher rates are observed in the knees of women and the hips in men.

**History and Symptoms:** Patients may have pain, stiffness, limited range of motion, loss of flexibility, swelling, weakness deformed joints, and damaged cartilage. As the disease progresses, joint pain and discomfort that could be relieved with rest become persistent and limit activity and reduce the quality of life.

**Physical Exam:** Physical examination will focus on the joint range of motion, structure, tenderness, and strength of the associated muscles. Walking ability will be examined, as well. Evaluation of self-care and depression in the face of chronic pain are also necessary.

**Diagnostic Process:** OA is often diagnosed by physicians trained in muscles and bones, such as a PM&R physician, using a patient's history, physical exam, imaging, and sometimes other techniques. Imaging used includes X-rays, MRI, CT, or bone scans. Other techniques include fluid removal from an affected joint that is analyzed, and arthroscopy, which involves the insertion of a small scope into the joint, can be used to view the damage.

**Rehab Management:** Arthritis is managed best initially by a physical medicine and rehabilitation (PM&R) physician who is highly trained in the conservative treatment of joint and muscle problems. Treatment methods used include weight loss, acetaminophen, NSAIDs, corticosteroid injections, viscosupplementation and rehabilitation. Viscosupplementation has recently become more common as it helps to alleviate arthritis pain through injection of a gel-like substance that mimics the natural lubricant created in the joint to allow more “cushion” within the joint. If pain is still persistent regardless of conservative management, a referral from a PM&R physician to an orthopedic surgeon may be necessary to consider total joint arthroplasty.
Other Resources for Patients and Families: Patient and family education about weight reduction, exercise, and use of pain medications is beneficial. Several organizations can offer information and support for patients and families.

Frequently Asked Questions

What is PM&R?
Physical medicine and rehabilitation (PM&R), also known as physiatry, is a primary medical specialty that aims to enhance and restore functional ability and improve quality of life to those with injuries, physical impairments or disabilities affecting the brain, spinal cord, nerves, bones, joints, ligaments, muscles and tendons. PM&R physicians, known as physiatrists, evaluate and treat the whole body, maximize patients’ independence in their daily life and are experts in designing comprehensive, patient-centered treatment plans to empower patients to achieve their goals. By taking the whole body into account, they can accurately pin-point problems, decrease pain, assist in recovery from devastating injuries and maximize overall outcomes and performance with non-surgical and peri-surgical options. To learn more, visit www.aapmr.org/aboutpmr.

What makes PM&R physicians unique?
PM&R physicians’ training focuses not just on treating medical conditions, but on enhancing the patient’s performance and quality of life in the context of those medical conditions. They focus not only on one part of the body, but instead on the development of a comprehensive program for putting the pieces of a person's life back together – medically, socially, emotionally and vocationally – after injury or disease. PM&R physicians make and manage medical diagnoses, design a treatment plan and prescribe the therapies that physical therapists or other allied therapists perform or that are carried out by the patients themselves. By providing an appropriate treatment plan, PM&R physicians help patients stay as active as possible at any age. Their broad medical expertise allows them to treat disabling conditions throughout a person’s lifetime.

Why see a PM&R physician?
A PM&R physician will thoroughly assess your condition, needs, and expectations and rule out any serious medical illnesses to develop a treatment plan. By understanding your condition and goals, you and your PM&R physician can develop a treatment plan suited to your unique needs.

How do I find a PM&R physician near me?
Visit www.aapmr.org/findapmrphysician or contact your primary care physician for a referral.