

Inflammatory Arthritides

Condition: Inflammatory arthritides affect the joints and related structures. Conditions include rheumatoid arthritis (RA), systemic lupus erythematosus (SLE), gout, pseudo-gout, ankylosing spondylitis (AS), psoriatic arthritis (PsA), gonorrhea, tuberculosis, and osteomyelitis.

Background: The causes of many of these inflammatory diseases are unknown, although inflammation and genetics may play a role. Bacteria, fungi, and viruses can cause infectious forms of arthritis.

Risk Factors: Inflammatory arthritides affect all age groups. RA affects women more than men particularly in people of European descent with a peak age of 25 to 50 years. SLE occurs more often in African Americans and 90% of patients are female. PsA and AS are more common in younger populations.

History and Symptoms: Gradual joint swelling and pain occurs for all inflammatory arthritides. RA presents with disease in small joints, such as the fingers, hands or wrists, and progresses to disease in large joints, including knees, shoulders, or hips. RA patients may also often present with serious systemic issues such as upper neck dislocation, heart disease, kidney problems, and inflammation of the blood vessels. Inflammatory back pain suggests AS and symptoms in the fingertips or toes and skin plaques suggest PsA. Rashes are often seen in SLE and Lyme disease.

Physical Exam: Physical exam includes examining joints for pain, swelling, deformities, range of motion, and strength in addition to characterizing onset, duration of pain, or the involvement of other organ systems as well. A physical medicine and rehabilitation (PM&R) physician, will also use functional assessments to evaluate mobility and pain as it relates to activities of daily life.

Diagnostic Process: Laboratory blood tests including complete blood count, rheumatoid factor, and specific autoantibodies can help with diagnosis. X-rays can be used to document severity and disease progression. MRI can detect changes in the bones or soft tissues earlier. Ultrasound, however, is a low-cost alternative that can show early changes within and outside of the joint as well. Joint fluid analysis can differentiate inflammatory, non-inflammatory, or infectious arthritis.

Rehab Management: The primary goal of treatment is the absence of symptoms. Non-steroidal anti-inflammatory drugs (NSAIDS) can relieve pain and inflammation, however they do not alter disease course and can have serious adverse effects on the heart, kidney or gastrointestinal system. Ultimately, other medications, including immunosuppressive drugs, biologic agents, or immune-targeting drugs, are effective alone or in combination for disease control.

Rehabilitation involves joint support and protection, strengthening, stretching, and energy conservation under the guidance of a physiatrist. Physical activity itself can decrease inflammation and exercises, resistance or aerobic training should be tailored based on the degree and chronicity of pain or inflammation in the affected joints. Aquatic therapy, heat, or cold can reduce pain and stiffness along with electrical stimulation. Splinting maintains alignment and improves joint stability. Severe joint disease may warrant joint replacement surgery followed by inpatient rehabilitation.

A PM&R physician is ultimately best equipped to oversee rehabilitation of inflammatory arthritides as they are trained in the interdisciplinary management of complex neuromuscular and inflammatory diseases with a focus on function and improving quality of life. PM&R physicians can best assess environmental limitations to identify potential home or workplace accommodations that may reduce disability. PM&R physicians excel in working with an interdisciplinary team including other medical specialists or therapists to coordinate care. Their expertise in neuromuscular medicine enables them to provide targeted exercise prescriptions to improve function as well.

Other Resources for Patients and Families: Patient education focusing on coping with pain, anticipated disease course, and joint protection improve community participation and minimize healthcare costs. The American College of Rheumatology website contains additional valuable resources:

<http://www.rheumatology.org>.

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.