

Age-Associated Changes and Biology of Aging

Condition: The changes that occur in all people as they get older are part of the process called normal biologic aging.

Background: Biologic aging occurs in all humans regardless of their environmental or cultural differences. The normal process of aging causes progressive and cumulative changes in all systems of the body. These include changes in the muscles, bones, joints, nerves, and essentially all of the other organ systems. As a result, these changes can affect the quality of a person's vision, hearing and their ability to carry out both physical and intellectual activities.

Risk Factors: Even though aging occurs in humans as well as all other species, the reasons behind this process are not yet well understood. There are many theories for why this process may occur. It may be due to a progressive imbalance between damage to the many systems within the body and our own ability for self-repair. As we age our repair methods become less efficient and this leads to an accumulation of damage and to functional decline. Damage may be caused by many sources such as: genetic mutations, radiation, toxins, infection, poor diet, as well as many other types of exposures.

Rehab Management: Physical medicine and rehabilitation (PM&R) physicians are especially well positioned and trained to play a vital role in the treatment of patients of all ages. PM&R physicians are distinguished from clinicians of other fields in that our treatment is primarily focused on function, and that we treat the whole person not just specific problem area or organs. Due to their fundamental knowledge regarding healthy aging they are able to recognize diseases of aging early, often before they become problematic to the patient. PM&R physicians focus on treatment, education and provide other adaptive strategies to support patients in meeting their functional goals. The importance of exercise cannot be understated, which is why our mission for advocating that "exercise is medicine" often leads to many positive effects such as: controlling blood pressure, optimizing oxygen consumption, slowing muscle and bone density loss, maintaining joint mobility and overall cognitive function. PM&R physicians have vast knowledge of exercise with specific type, duration, and intensity of exercise and can play a vital role in the treatment of diseases of aging. PM&R physicians can prescribe an individualized exercise plans which can potentially slow the effects of aging on the heart, lung, muscles and bone and overall optimize a person's functioning.

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.