Orthostasis

Condition: Orthostasis or orthostatic hypotension (OH) is a decrease in blood pressure that happens soon after standing or sitting up. When a person stands up, gravity causes blood to pool in the legs. This reduces blood pressure since less blood is circulating back to the heart to pump.

Background: OH occurs in approximately 20% of people older than 65 years. Thirty percent of fainting episodes in the elderly are due to orthostasis.

Risk Factors: There are many common risk factors for developing OH including age, long-term bedrest, medications, and disease, with age being the most important. On the inpatient setting, hospitalization course and duration of admission are important factors contributing to deconditioning. Specific disease conditions are also associated with OH including diabetes, MS, Parkinson's, and patients with a spinal cord injury. Medications, specifically blood pressure or diuretic medications (water pills), as well as polypharmacy (taking multiple medications), are also common risk factors.

History and Symptoms: It is important to know about medications, hydration, nutrition, weight loss, activity level and other medical problems. Orthostasis can cause lightheadedness, dizziness, blurry or dim vision, and fainting, which in turn leads to falls and injuries. Symptoms can be more subtle, such as fatigue, leg buckling, and slight shortness of breath when changing position. Symptoms improve by laying down.

Physical Exam: A PM&R physician typically checks the patient's blood pressure and heart rate while the patient is lying down, sitting, and standing. Diagnosis of OH is made when the patient develops a decrease in at least 20 mmHg in systolic pressure, and/or a decrease in at least 10 mmHg in diastolic pressure. Physicians also assess for conditions such as Parkinson's disease, cognitive impairment, depression, stroke, and neuropathy.

Diagnostic Process: A physical medicine and rehabilitation (PM&R) physician, also known as a physiatrist, may choose to order blood tests or evaluate your heart function with an electrocardiogram (ECG). More specialized tests, like an echocardiogram, may be helpful if evaluating for medical conditions contributing to orthostasis.

Rehab Management: The first step your PM&R physician may take is to identify and treat common causes that can cause OH, such as dehydration, nutritional problems, and medications. PM&R physicians are also experts in treating diseases commonly associated with OH such as MS, Parkinson's, and Spinal Cord Injured patients. PM&R physicians will also teach you strategies to manage symptoms and help you get back to the activities you enjoy. This can include raising the head of the bed slightly at night, flexing your feet or crossing your legs prior to standing. Other countermeasures include cognitive exercises to maintain sympathetic tone, early re-mobilization after bedrest, and maintaining an active lifestyle. Certain garments can help with blood flow, like waist high compression stockings and abdominal binders. Your physician may recommend a medication to improve your blood pressure.

Other Resources for Patients and Families: Patients and caregivers should feel informed and understand what is causing the orthostasis and make changes so the issue is resolved or improved, such as moving the legs before standing. Making sure any adverse effects from medication, such as dizziness, are managed is important, too. Support stockings or garments should always be removed when lying down.

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.