

A resource on Physical Medicine and Rehabilitation (PM&R) topics developed by the American Academy of Physical Medicine and Rehabilitation (AAPM&R)

Metabolic Encephalopathies

Condition: Metabolic encephalopathies (ME) are disorders where medical problems such as infections, organ dysfunction, or electrolyte imbalance impair brain function.

Background: Severe illnesses that affect many systems in the body may cause ME. Older age and cognitive impairment may increase the risk of developing this.

History and Symptoms: Symptoms usually, but not always, come on suddenly. Patients may be confused, uncooperative, and have low energy. With chronic diseases, the symptoms may come on gradually.

Physical Exam: The doctor will check all of the body's basic functions such as temperature, heart rate, breathing, and blood pressure. They will also do a more complete neurologic exam to identify changes in their strength, sensation, thinking, and behavior.

Diagnostic Process: Blood tests are generally done to identify which systems in the body are having problems. They may help to suggest possible infection or identify drugs or toxins in the blood. Urine tests are also frequently performed to assess for infection and spinal fluid may be sampled if needed. CT or MRI may be used in certain cases to rule out conditions such as stroke or other problems.

Rehab Management: The first step is treating the disease that caused ME. Drugs may be given for agitation to help get them through this acute episode if needed. It is important to get the patient moving as soon as possible to prevent them from developing complications such as bed sores or muscle weakness. The physical medicine and rehabilitation (PM&R) physician will assist in the coordination of interdisciplinary care to promote optimal recovery of strength, balance, coordination, mobility, and cognitive function. This will take place while managing the underlying medical issue that leads to the onset of ME so that symptoms do not recur or worsen as they complete their therapy.

Care coordination is vital for a successful transition from acute inpatient rehabilitation to home, and community re-entry. Case managers and social workers should provide information regarding various options available to patients and family including home PT/OT, day programs, and cognitive rehabilitation programs.

Other Resources for Patients and Families: Families can help with both short-term and long-term care to keep ME from coming back and help the patient cope with problems.



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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.