

## Disorders of Language, Speech and Swallowing

**Condition:** Disorders of language, speech, and swallowing include aphasia, which is disturbance of language skills as the result of brain damage; apraxia of speech, which is a disorder of movements involved in speaking; dysarthria, which includes difficulty in pronouncing words clearly due to muscle paralysis or weakness; and dysphagia, which is a swallowing disorder that makes eating and drinking difficult and potentially unsafe.

**Background:** Communication disorders affect 14 million people in the United States and are most commonly associated with stroke. A swallowing disorder is estimated to occur in 60% of long-term health care facility residents and 30% of general medicine inpatients.

**Risk Factors:** Language, speech, and swallowing disorders are commonly diagnosed in people with stroke, brain injury, lack of oxygen, tumors, birth defects, degenerative neurological diseases, and developmental problems.

**History and Symptoms:** Symptoms will depend on the underlying causes of the disorder. Patients with language disorders (aphasia) may have trouble speaking, understanding spoken language, reading, or writing, depending on the brain region that is affected. Patients with speech disorders (apraxia of speech or dysarthria) may have slow speech, difficulty pronouncing words or sounds, speech errors, choppy speech, mumbling, or alterations in voice. Patients with swallowing disorders (dysphagia) have difficulty swallowing, may cough during or after eating or drinking, have poor nutrition or dehydration, or trouble keeping food or liquids in the mouth or safely getting it to their stomach.

**Physical Exam:** A physical exam will be performed in conjunction with formal speech and language assessment tools to identify specific difficulties with speech, comprehension, reading, writing, pronunciation, control of the voice box, breath during speech, and production of different sounds. For swallowing disorders, evaluation of sensation in the mouth; movement of the face, lips, and tongue; ability to follow directions; saliva management; and actual swallowing will be performed.

**Diagnostic Process:** For swallowing disorders, swallow studies will evaluate the process by X-ray or using a small scope inserted into the throat. A variety of assessment tools have been developed for diagnosis of the specifics of these language, speech, and swallowing disorders.

**Rehab Management:** Disorders of language, speech and swallowing that result from stroke, trauma, and lack of oxygen typically improve over time, while progressive disorders result in variable improvements depending on treatment and the specifics of the underlying problem. Speech-language therapy is used to maximize communication skills. Some medications may be helpful in treating language disorders (aphasia). For motor problems (dysarthria), therapy focuses on development of strength and coordination of muscles used in speech. Communication devices may be used to assist patients who cannot be understood. Therapy for swallowing disorders includes strategies for reducing the risk of choking and aspirating food into the lungs, improving positioning for eating, exercises to improve swallowing, and thickening liquids or changing textures of solids. Feeding tubes may be necessary if swallowing disorders prevent proper hydration or nutrition. Your physical medicine and

rehabilitation (PM&R) physician can assess your prognosis for recovery. S/he can coordinate additional services including psychologists and dieticians.

**Other Resources for Patients and Families:** There are local support groups in many locations, as well as online.

## 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](http://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/findapmphysician](http://www.aapmr.org/findapmphysician) or contact your primary care physician for a referral.