Burning Thigh Pain (Meralgia Paresthetica)

The nerves in your body bring information to the brain about the environment (sensory nerves) and messages from the brain to activate muscles (motor nerves). To do this, nerves must pass over, under, around, and through your joints, bones, and muscles. Usually, there is enough room to permit easy passage.

Swelling, trauma, or pressure can narrow these openings and squeeze the nerve. When that happens, pain, paralysis, or other dysfunction may result.

Symptoms

A painful, burning sensation on the outer side of the thigh may mean that one of the large sensory nerves to your legs—the lateral femoral cutaneous nerve (LFCN)—is being compressed. This condition is known as meralgia paresthetica (me-ral'-gee-a par-es-thet'-i-ka).

- Pain on the outer side of the thigh, occasionally extending to the outer side of the knee
- A burning sensation, tingling, or numbness in the same area
- Occasionally, aching in the groin area or pain spreading across the buttocks
- Usually only on one side of the body
- Usually more sensitive to light touch than to firm pressure

Diagnosis

During a physical examination, your physician will ask about recent surgeries, injury to the hip, or repetitive activities that could irritate the nerve. He or she will also check for any sensory differences between the affected leg and your other leg. To verify the site of the burning pain, the physician will put some pressure on the nerve to reproduce the sensation. You may need both an abdominal and a pelvic examination to exclude any problems in those areas.

X-rays will help identify any bone abnormalities that might be putting pressure on the nerve. If your physician suspects that a growth such as a tumor is the source of the pressure, he or she may ask for a magnetic resonance image or a computed tomography (CT) scan. In rare cases, a nerve conduction study may be advised.

Restrictive clothing and weight gain are two common reasons for pressure on a nerve. Your physician may ask if you wear a heavy tool belt at work or if you consistently wear a tight corset or girdle. He or she may recommend a weight loss program. Another reason may result from a seatbelt injury during a motor vehicle injury.

Treatment

Treatments will vary, depending on the source of the pressure. It may take time for the burning pain to stop and, in some cases, numbness will persist despite treatment. The goal is to remove the cause of the compression. This may mean resting from an aggravating activity, losing weight, wearing loose clothing, or using a toolbox instead of wearing a tool belt. In more severe cases, your physician may give you an injection of a corticosteroid preparation to reduce inflammation. This generally relieves the symptoms for some time. In rare cases, surgery is needed to release the nerve.

Last reviewed: August 2007

AAOS does not endorse any treatments, procedures, products, or physicians referenced herein. This information is provided as an educational service and is not intended to serve as medical advice. Anyone seeking specific orthopaedic advice or assistance should consult his or her orthopaedic surgeon, or locate one in your area through the AAOS “Find an Orthopaedist” program on this website.