

Iliotibial Band Syndrome

Condition: Iliotibial band syndrome (ITBS) refers to a painful knee injury caused by inflammation around the knee.

Background: The iliotibial band (ITB) runs from the outside of the hip to the outside of the knee. In many sports such as running and cycling, repeated flexing and extending the leg can cause the ITB to rub against the thigh bone near the knee, which leads to inflammation.

Risk Factors: Runners and cyclists are most likely to develop ITBS. Women are more likely to be affected than men. Training changes such as running or cycling faster or on hills, or new shoes or bicycle equipment may also lead to ITBS.

History and Symptoms: Pain occurs at the outside part of the knee, especially when standing. The pain may also move into the thigh and hip.

Physical Exam: A physical medicine and rehabilitation (PM&R) physician will check for tenderness and tightness in the area around the knee, thigh, and hip. They will also check any limitations in range of motion at the hip and knee. Functional maneuvers such as the single-leg squat will also be examined to look for muscle weakness.

Diagnostic Process: There are no blood tests for ITBS. MRI may be used to see if the ITB is thicker than usual. A PM&R physician may be trained in using ultrasound to evaluate the ITB in real-time. By watching videos of the patient running or cycling, an expert in biomechanics may be able to see what is causing the problem.

Rehab Management: A PM&R physician is trained to create a well-structured rehabilitation program for patients with ITBS. Treatment starts by reducing inflammation with rest, ice, and sometimes corticosteroids and other pain medications applied to the skin. A machine that delivers ultrasound or electric waves may be used to make sure drug penetrates to where it is needed. When pain is gone, there can be a gradual return to running or cycling. A physical therapist or athletic trainer will work on ITB stretching and strengthening. Running shoes should fit properly and be replaced when they wear out. Bicycle fit should also be checked. Regenerative injection therapies (i.e. platelet rich plasma injections), needle fenestration or surgical iliotibial band release may also be offered as treatment in cases of ITBS that do not respond to rehabilitation.

Other Resources for Patients and Families: Patient and family education about the best way to train and the importance of resting before returning to the sport is very important.

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.