

Helping Hand[™]

Health Education for Patients and Families

Sports Medicine: Avulsion Fracture of the Iliac Crest

Avulsion fractures occur when a small piece of bone is separated from the main bone due to the pull of the muscle and tendon attached to it. This typically occurs in growing bone, which is weaker than mature bone. In the hip, this often occurs at the iliac crest, the bony part of the front and side of the pelvis. Many belly (abdominal) and hip muscles attach to the crest of the hip.

Signs and Symptoms

- Pop heard at the time of injury
- Pain with twisting or doing a sit-up
- Pain with walking and often walking with a limp

Increased Risk

- Sports that require repeated fast motion such as kicking (soccer, football)
- Males between ages of 11 to 18
- Poor physical conditioning (strength and flexibility)

- Pain over the iliac crest
- Weakness when bending the hip
- Swollen or tender area along the front or side of the hip
 - Previous thigh, knee, or pelvis injury
 - Poor technique or posture or poor warm-up before practice or play
 - Sports with a lot of sprinting (soccer, track)

Treatment

- Medicine
 - Anti-inflammatory medicines, like ibuprofen (Motrin[®] or Advil[®]) or naproxen (Aleve[®]) may be recommended. Take these as directed by your doctor or health care provider.
 - Other minor pain relievers, such as acetaminophen (Tylenol[®]) may be taken.

- Use of cold and heat
 - Cold should be applied for 10 to 15 minutes every 2 to 3 hours and after any activity that makes symptoms worse. Use ice packs or an ice massage and raise the foot and ankle at or above heart level to reduce swelling.
 - Heat may be used before doing stretching and strengthening activities prescribed by your health care provider or athletic trainer. Use a heat pack or a warm soak. Apply for 10 to 15 minutes.
- Orthopedic aids
 - Crutches may be used to help with limping and pain for 2 to 4 weeks.
- Exercises
 - Exercises to stretch and improve strength and flexibility of the hip are helpful. These can be done at home, but often a referral to a physical therapist or athletic trainer may be advised by your health care provider.

How to Prevent

- Do correct warm-up and stretch before practice or competition
- Maintain proper conditioning, strength, flexibility, endurance, and cardiovascular fitness.

When to Call Doctor

Call your doctor, health care provider, or the Sports Medicine team at (614) 355-6000 if:

- Symptoms get worse or do not improve in 4 weeks, even with treatment
- New, unexplained symptoms develop

To schedule an appointment with Sports Medicine, visit NationwideChildrens.org/Sports MedicineScheduling or scan this code with your camera phone.

