



**NATIONWIDE CHILDREN'S**  
*When your child needs a hospital, everything matters.™*

## **Helping Hand™**

*Health Education for Patients and Families*

# **Sports Medicine: Salter-Harris Fracture-Type I of Distal Fibula (Growth Plate Fracture)**

A growth plate (physis) is an area of growing cartilage near the end of long bones in children. The growth plate is weaker than other areas of bone. It is more likely to be injured than other bones, muscles or ligaments because it is soft. When a growth plate is broken (fractured) it is put on a scale of from mild (1) to severe (5). This is known as the Salter-Harris grading scale. A Salter-Harris type 1 fracture is the mildest type of fracture that can occur to a growth plate. The distal fibula is the bone on the outside of the ankle. This injury typically occurs after inverting, or rolling the ankle. Because the growth plate is weak, this structure is injured instead of the surrounding ligaments, as in a typical ankle sprain.

### **Signs and symptoms**

- difficulty walking right after the injury
- decreased range of motion and weakness of the ankle
- pain, swelling, bruising and tenderness on the outside of the ankle
- not able to run or play sports

### **Increased risk**

- poor physical conditioning (strength, flexibility and balance)
- activities where the foot may land awkwardly (football, basketball, volleyball and soccer)
- shoes without enough support to prevent sideways motion when stress occur
- prior injury to that ankle

### **Treatment**

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

- Use of cold and heat
  - Cold should be applied for 10 to 15 minutes every 2 to 3 hours for swelling and after any activity that makes symptoms worse. Use ice packs or an ice massage.
  - Heat should not be used on a new injury but 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
  - An elastic bandage, brace, or walking boot may be used for a few weeks to decrease pain and allow the injury to heal.
- Rehab
  - Rehab may be prescribed to improve motion, strength, and balance, and to return the athlete to sports.

## How to prevent

- Maintain suitable conditioning, flexibility, muscle strength, endurance and cardiovascular fitness. Use proper technique.
- Taping, bracing or high-top tennis shoes may help prevent injury.
- Do correct warm-up and stretching before practice or competition.

## When to call the health care provider

Call your health care provider or the **Sports Medicine team** at **614-355-6000** if:

- symptoms get worse even with treatment
- you experience numbness, color change or coldness in the foot or toes
- new, unexplained symptoms develop

**To schedule an appointment  
with Sports Medicine, visit  
[NationwideChildrens.org/Sports  
MedicineScheduling](https://NationwideChildrens.org/SportsMedicineScheduling) or scan this  
code with your camera phone.**

