

# CHARCOT FOOT

Charcot foot is a condition causing weakening of the bones in the foot that can occur in people who have significant nerve damage (neuropathy). The bones are weakened enough to fracture, and with continued walking, the foot eventually changes shape. As the disorder progresses, the joints collapse and the foot takes on an abnormal shape, such as a rocker-bottom appearance. Charcot foot is a serious condition that can lead to severe deformity, disability and even amputation. Because of its seriousness, it is important that patients living with diabetes—a disease often associated with neuropathy—take preventive measures and seek immediate care if signs or symptoms appear.



Normal Foot

## Causes

Charcot foot develops as a result of neuropathy, which decreases sensation and the ability to feel temperature, pain or trauma. Because of diminished sensation, the patient may continue to walk—making the injury worse. Neuropathic patients with a tight Achilles tendon have been shown to have a tendency to develop Charcot foot.

## Symptoms

The symptoms of Charcot foot may include:

- Warmth to the touch
- Redness in the foot
- Swelling in the area
- Pain or soreness

## Diagnosis

Early diagnosis of Charcot foot is extremely important for successful treatment. To arrive at a diagnosis, the surgeon will examine the foot and ankle and ask about events that may have occurred prior to the symptoms. X-rays and other imaging studies and tests may be ordered. Once treatment begins, x-rays are taken periodically to aid in evaluating the status of the condition.

## Nonsurgical Treatment

It is extremely important to follow the surgeon's treatment plan for Charcot foot. Failure to do so can lead to amputation. Nonsurgical treatment for Charcot foot consists of:

- Immobilization. Because the foot and ankle are so fragile during the early stage of Charcot, they must be protected so the weakened bones can repair themselves. Complete nonweightbearing is necessary to keep the foot from further collapsing. The patient will not be able



Charcot Foot

to walk on the affected foot until the surgeon determines it is safe to do so. During this period, the patient may be fitted with a cast, removable boot or brace and may be required to use crutches or a wheelchair. It may take the bones several months to heal, although it can take considerably longer in some patients.

- Custom shoes and bracing. Shoes with special inserts may be needed after the bones have healed to enable the patient to return to daily activities.
- Activity modification. A modification in activity level may be needed to avoid repetitive trauma to both feet. A patient with Charcot in one foot is more likely to develop it in the other foot, so measures must be taken to protect both feet.

## When is Surgery Needed?

In some cases, the Charcot deformity may become severe enough that surgery is necessary. The foot and ankle surgeon will determine the proper timing as well as the appropriate procedure for the individual case.

## Preventive Care

The patient can play a vital role in preventing Charcot foot and its complications by following these measures:

- Keeping blood sugar levels under control can help reduce the progression of nerve damage in the feet.
- Get regular checkups from a foot and ankle surgeon.
- Check both feet every day—and see a surgeon immediately if you notice signs of Charcot foot.
- Be careful to avoid injury, such as bumping the foot or overdoing an exercise program.
- Follow the surgeon's instructions for long-term treatment to prevent recurrences, ulcers, and amputation.

FLAGSTAFF  
**BONE & JOINT**

ORTHOPAEDIC EXCELLENCE. EXCEPTIONAL CARE.

[www.flagstaffboneandjoint.com](http://www.flagstaffboneandjoint.com)