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Calcaneal Fracture: Causes and Treatment

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Introduction

A calcaneal fracture occurs in the calcaneus or heel bone, a large bone that forms the base of the back of the foot. Calcaneus fractures are not uncommon but injuries can be mild. The calcaneus is one of the seven tarsal bones and is part of the hind limb that connects the calcaneus with the talus. The hindfoot is attached to the tibia and fibula which forms the ankle joint. A combined subtalar or calcaneotalar account of at least one foot and plantar ankle. Ankle joint is essential for regular foot function. Most calcaneal fractures are the result of a very serious accident, a fall from a high place, in which the heel is crushed. Calcaneal fractures can also occur with other types of injuries, such as ankle sprain. A small number of calcaneal fractures are stress fractures, caused by overuse or repeated stress on the heel bone. Intra-articular fractures are a very dangerous calcaneal fracture and involve damage to the cartilage. The concept of recovery depends on how the calcaneus was crushed at the time of injury. Calcaneal fractures present a variety of signs and symptoms, depending on whether they are painful or stressful. Signs and symptoms of a painful fracture may include: Sudden pain in the heel and inability to carry weight on the foot, Swelling in the heel area, Injury to the heel and ankle. Calcaneal fractures can be serious injuries that can result in lifelong problems. Sometimes a broken bone fails to heal in the right place. Intra-articular calcaneal fractures are categorized based on the number of articular fragments. Calcaneal fractures are usually caused by shear pressure combined with the compressive force associated with the circulatory system. Other long-term possible side effects of calcaneal fractures are decreased ankle movement and limping due to heel bone fractures and loss of leg length. Patients often require additional surgery or long-term use of a brace or orthotic device to help manage these problems. The decision to proceed with surgery should be based on informed consent for the many risks and expected benefits of surgery and should involve the patient. Open calcaneal fractures require urgent decompression and careful wound management. The effects of open calcaneal fractures are usually worse than closed fractures. Non-surgical treatment for extra-articular fractures and intra-articular fractures is performed, as long as the area carrying calcaneal weight and foot function is not damaged. Physicians may choose to perform closed-loop reduction with only one correction or adjustment, depending on the individual condition. Recommendations include weight loss for a few weeks followed by a variety of movement exercises and continuous weight bearing for a period. Fractures of removed intra-articular fractures require surgical intervention, prior to bone resorption. This process is associated with lower wound problems, better healing of soft tissues and shorter operating time. This procedure has increased the risk of calcaneal bone loss, compared to open procedures. Open surgery with internal correction is usually the preferred surgical procedure when dealing with an intra-articular fracture removed. New surgical techniques and new equipment, reduce the incidence of internal and postoperative complications.

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