OSTEOCHONDROSIS DISSECANS OF THE TALUS

Sometimes severe ankle sprains can result in injury to the bones of the ankle, particularly the talus, in addition to the usual injuries to the ligaments. The talus is particularly at risk for injuries when it is twisted up and in or down and out. Damage to the talus may not be obvious at first despite a significant sprain. It may take weeks for the parent and child to realize that the pain and swelling has continued beyond the normal time period for an ankle sprain. At this point, assessment of the ankle includes a thorough physical examination and x-rays.

If the x-rays indicate that there is a bony abnormality in the talus suggestive of an osteochondritis dissecans then an MRI and/or CT scan may be ordered for the purposes of diagnosis and determining a treatment plan.

Osteochondritis dissecans is classified into four stages and recommendations for treatment are dependent on the stage of the injury and age of the patient. Most patients will have crushed a small area of bone but the overlying cartilage will be intact. For these individuals a brief period of non-weight bearing in a cast for one to three months is recommended to give the damaged bone a chance to rebuild itself and support the articular cartilage.

The next stage occurs when the damaged bone fragment and its overlying cartilage have pulled away partially from the rest of the talus. For the majority of these abnormalities an arthroscopic procedure is required in order to secure the detached bone and cartilage to the talus and to reestablish blood flow into the area of damaged bone.

In the last two stages the bone fragment is separated from the underlying bone and the blood supply has been severely damaged. The pediatric orthopedic surgeon will attempt to determine the severity of the osteochondritis dissecans and whether or not it is a stable lesion.
Stable lesions can be treated with a period of immobilization and non-weight bearing, usually six to twelve weeks, and restriction of strenuous athletic activities for another two-to-three months. For fragments that are in the process of separating from the talus or have separated from the talus surgical reconstruction is required to restore the fragment to the normal position and promote improved healing. This provides the best chance for continued growth and development of the talus and minimizes the risk for premature arthritis.