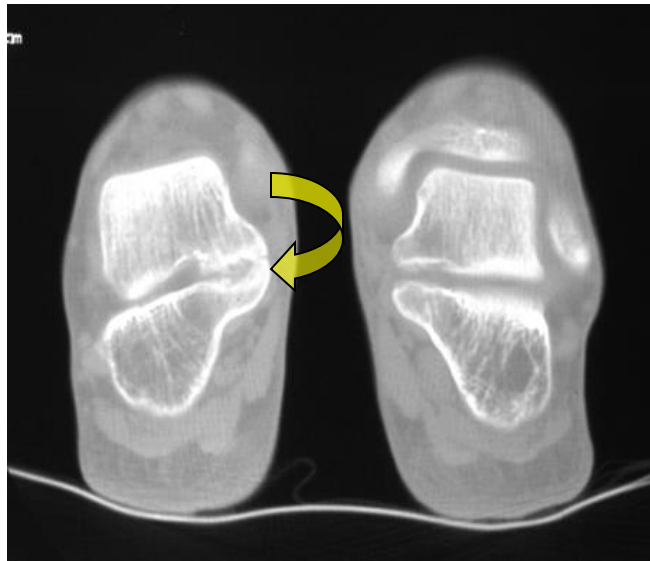
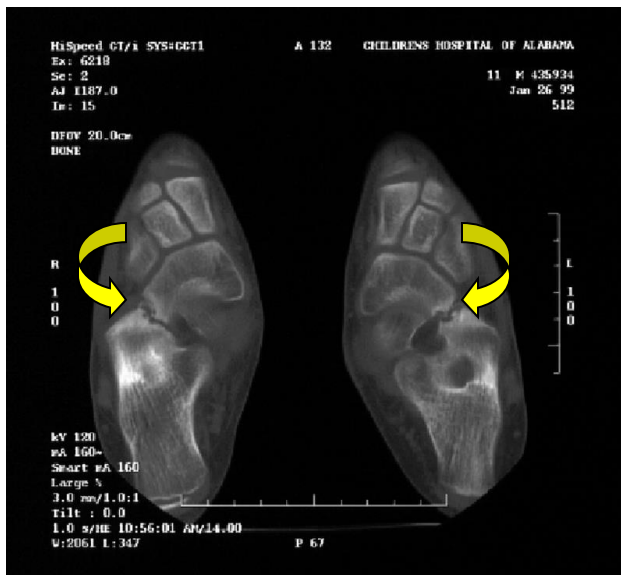


Tarsal Coalition

A tarsal coalition is an abnormal connection (coalition) between two of the bones in the foot known as the tarsal bones. A child or adolescent with a tarsal coalition may experience repeated ankle sprains or simply have pain in the ankle without any obvious injury. Often the involved foot is stiff and has a flat footed appearance.

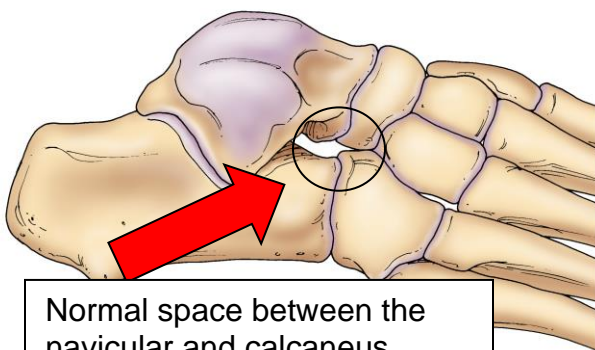


Evaluation for a tarsal coalition includes examination of the foot to determine whether there is limited motion of the ankle and foot. X-rays may show subtle signs of a coalition but often are not diagnostic. An MRI or CT scan may be necessary for definitive diagnosis.

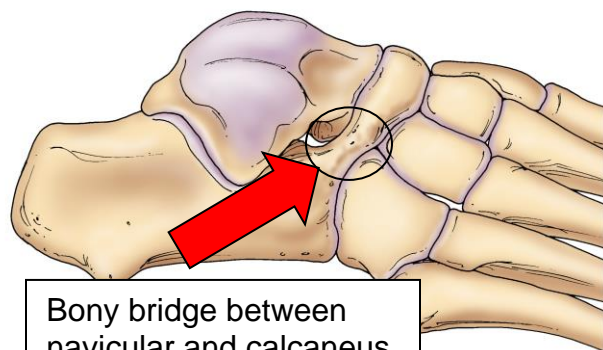


Tarsal Coalitions are treated based on the level of symptoms experienced by the child. Simple methods such as temporarily decreasing the level of physical activity along with over the counter anti-inflammatory medication will often alleviate the pain from a tarsal coalition and allow the child to resume normal activity. However, some children may require immobilization of the foot and ankle in a cast or walking boot.

In a small percentage of patients non-surgical treatments are not successful in relieving pain. For these patients, surgical excision of the connection between the two bones may be recommended. In the picture on the left, the normal space between the navicular bone and the calcaneus bone is present. In the picture on the right, the navicular bone and the calcaneus are joined together with an abnormal bridge of bone.

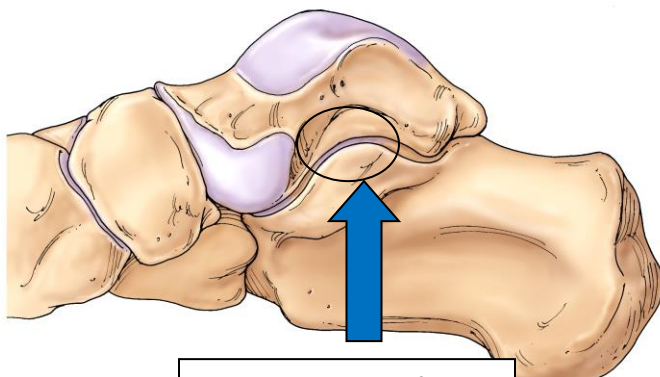


Normal space between the navicular and calcaneus

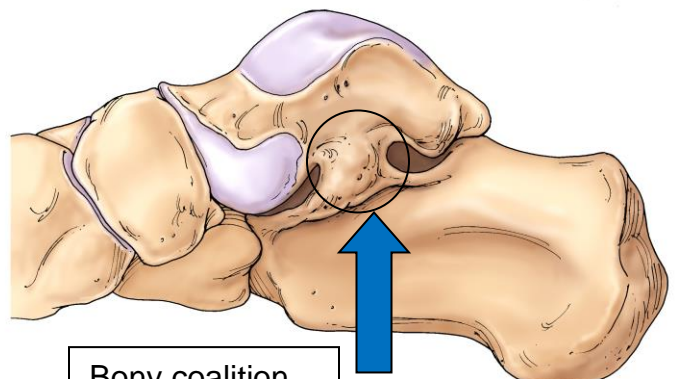


Bony bridge between navicular and calcaneus

The pictures below show a coalition between the ankle bone (the talus) and the heel bone (calcaneus). Normally these two bones are linked by three hinges called facets. A coalition between the talus and the calcaneus occurs when one of these facets, usually the middle facet, doesn't form properly. Motion is severely restricted and can only be improved by surgically removing the bridging bone.



Normal middle facet



Bony coalition

Postoperatively, physical therapy may be required to develop an improved range of motion in the foot and diminish a limp that may have been present. These patients will be followed into adulthood to monitor for evidence of pain, increased stiffness, or loss of normal bony alignment.



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