Flat Foot Deformity

There are multiple causes of "flat feet" (a foot without an arch) Differentiation should be made between a foot that has an arch that flattens when standing and one that never has an arch. Causes include normal anatomical variation, an abnormal connection between bones of the foot called a tarsal coalition, in the adult mid foot arthritis or adult acquired flatfoot deformity- posterior tibial tendon deficiency. Fortunately, a foot that appears flat when standing, but is not associated with pain or functional limitation requires no treatment. Previously bracing for these children was commonplace, but the bracing was not found to provide any benefit.

Two types of tarsal

If the foot is painful, treatment should be sought. Depending on the underlying cause, treatment may include a period of immobilization, shoe inserts (orthotics), physical therapy, or surgical intervention. These conditions in the adult are commonly associated with tight hamstrings and calf muscles, therefore a routine stretching program is a good place to start.

In Children: Tarsal coalition (a joint that never developed properly) typically becomes painful between 8-12 years of age, is often mistaken for recurrent ankle sprains, and therefore sometimes is not diagnosed until adulthood. In the younger patient it is surgically treated with removal of the abnormal connection between bones; a short outpatient procedure that allows restoration of motion and pain relief.

In Adults: Adult acquired flatfoot deformity - posterior tibial tendon deficiency that causes pain despite non-operative management is treated with a variety of surgical procedures that are tailored to the patient and their specific deformity. There are different treatment methods between patients with flexible deformity compared to fixed deformity. *Short video (without sound) on fixed vs flexible deformity:* (https://youtu.be/4PYRGk9_cb8)