History
18 month old female with foot deformity.

Diagnosis
Congenital Vertical Talus

Discussion
Congenital vertical talus (CVT) consists of rigid pronation of the foot with a convex plantar arch and equinus of the heel. It may be an isolated condition, exist as part of a syndrome (e.g. craniocarpotarsal dysplasia, trisomy 13, trisomy 18), or be associated with other systemic abnormalities (arthrogryposis, congenital hip dislocation). It occurs in 10 percent of patients with myelomeningocele.

On AP radiographs there is severe valgus deformity with the calcaneus displaced laterally and the talus pointing medially. Lateral images demonstrate severe equinus of the calcaneus. The talus has a vertical attitude and may have a hypoplastic neck. Contracture of the Achilles tendon and flexor digitorum longus result in navicular dislocation so it is dorsal to the talar neck instead of opposite the talar head. The metatarsals are dorsiflexed and there is convexity of the plantar arch.

Radiographs allow distinction of CVT from severe planovalgus, which may appear similar on physical exam but is distinguished by a normal position of the navicular opposite the head of the talus and absence of calcaneal equinus. Early diagnosis of CVT is necessary because it cannot be reduced by manipulation or casting, but requires surgical correction.

Findings
CR-Lateral radiographs of the right and left feet demonstrate severe hindfoot valgus, nearly vertical talus and abnormal talonavicular articulation bilaterally.

Reference

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