INTRODUCTION
Your child has been diagnosed with calcaneovalgus feet. This is a postural deformity of the feet found in infants, in which the foot appears to be “plastered” up against the front of the tibia. This deformity is due to abnormal positioning of the foot in utero. If there is good flexibility, the motion and position of the feet will improve with time. Postural deformities such as calcaneovalgus resolve spontaneously in the vast majority of cases.

BACKGROUND
Calcaneovalgus is a descriptive term that describes the position of the foot, especially the heel. Calcaneus is used to indicate that the heel is downward (as in the ankle flexed upward). Valgus indicates that the heel is turned outward. Calcaneovalgus feet are described as a "packaging problem" in which the structures have been normally formed, but then have been deformed toward end of the pregnancy due to in utero crowding. The incidence of this deformity is not well established, but is estimated at less than 1 in 1000 births. It is more common in first-born children and females. There is an association with other "packaging problems" which include less benign problems of the neck and hip. When there is enough pressure to cause calcaneovalgus feet, there may also be enough pressure to cause hip dysplasia or a muscular torticollis.

DIAGNOSIS
Diagnosis is made by physical exam. The feet have a classic appearance with the feet bent upward. The heel bone (calcaneus) should be palpable in the heel pad in a dorsiflexed or "calcaneus" position. There should be good ankle motion, which may be mildly limited by tight anterior structures. There should be good flexibility to the hindfoot and forefoot. It is important to verify this flexibility. Your doctor will also look for other types of "packaging problems". Imaging studies, like a hip ultrasound, may be indicated to rule out hip dysplasia.

TREATMENT
Almost always, the feet improve with time. Gentle stretching and massage may facilitate the improvement in appearance and mobility. Generally within 1-2 months, the foot position has normalized. In more severe presentations, there may be a role
for serial casting, followed by stretching exercises and a plastic AFO type splint for a few additional months in order to assure satisfactory foot position when the infant begins to stand.

**EXPECTED OUTCOME AND PROBLEMS**
The prognosis for calcaneovalgus foot is excellent. Rarely, there can an associated external rotation alignment to the legs as the child starts walking due to the bone shape or posterior tightness at the hips. This usually corrects itself with time and growth. Several authors have reported a correlation with symptomatic hypermobile flat feet in the older child. This can be treated if it develops with special exercises and/or arch supports.

**MORE INFORMATION**
Further information can be obtained on the internet. Your local public library can help you if you are interested. Two good sites for expert and peer reviewed information are the American Academy of Orthopedic Surgeons at [www.aaos.org](http://www.aaos.org) and [www.emedicine.com](http://www.emedicine.com).

**FEEDBACK**
If you have questions or comments, please contact the office or submit them to the web site at [www.pedortho.com](http://www.pedortho.com).