

14. Podiatry

Podiatric problems in children with Progeria Shoe inserts



Podiatric problems in children with Progeria

Several factors contribute to the challenging foot care issues for children with Progeria. These include a lack of a proper fat padding, skin abnormalities, toenail dystrophy, and limited joint range of motion in the ankle. These issues result in calluses (corns), blisters, heel discomfort, and an inability to walk on hard surfaces without shoes or slippers. Annual evaluation by a podiatrist are recommended. Calluses can be treated with moleskin or other padding. Massaging gently with moisturizing lotions can help to alleviate pain.

Children with Progeria have a gait deviation that is typical of someone with limited foot motion. The normal foot is capable of adapting to terrain that is uneven as the soft tissues of the foot allow the hind foot, mid-foot, and forefoot to function independently from one another. Since children with Progeria have markedly diminished soft tissues of the foot, walking is unstable for the children.

Feet become sensitive to hard surfaces and shoes. Shoe inserts and slippers help prevent pain, blisters, and calluses.

Shoe inserts

Upon clinical exam, the normal padding associated with the plantar surface of the foot is not present, so accommodating the length of the foot to a shoe tends to be a difficult task. The foot of a child with Progeria is very narrow. The lack of padding also makes walking painful because the bones of their feet absorb all of the shock of gait.

Custom shoe inserts are recommended. They are often arranged for through the child's podiatrist. A well-padded, soft but supportive material is used to help stabilize the foot. First, an impression is made using an impression cast. This is then used to make a positive mold of the child's foot. A trilaminate material is then heated to become flexible and vacuum formed over the molds. Since it helps to take some of the volume up within the shoe, very little material is cut away to fill the extra space so the feet do not slide within the footwear.