

## **Curly or Hammer Toes in Infants and Toddlers**

Parents are often concerned about infants and toddlers having curly toes or toes that are already hammered. This is a very common chief complaint. They worry that their children will have pain and misshapen toes/deformities/hammertoes later in life. They want to do everything for these children (rightfully so). Common "reverse deformity stretching" aka stretching in the opposite direction of the deformity, is sometimes not enough and there can be deforming forces working against these daily stretches. These deforming forces are seen in kids with flexible flatfeet (which most kids have at this age). Surgery is highly discouraged for this condition.

This child is an 11-month-old who presented as a new patient initially at 6 months with a "curly" lesser digit on one of his feet. At that initial evaluation parents were given stretching exercises for the toe to try and help straighten the deformity. Today he presents at 11 months and is starting to cruise (hold onto objects to walk).

Bottom line: the patient was dispensed littlesteps foot orthotics today (for reasons below) and will do phenomenal.



Picture #1 - curly toe deformity

This patient illustrates many pediatric ideas :

1 - Flexor stabilization of the lesser digits (by the FDL) is a powerful deforming force of the lesser digits. Kids with pre-existing digital deformities will worsen without intervention.

2 - Flexible flatfeet causes overuse/overfiring of the FDL. Whether it is severe or typical flexible flatfoot in these kids the stabilization forces are still seen.

3 - Littlesteps stabilize the heel valgus/eversion/flexible flatfoot and thus significantly decreases the instability of the child and thus decreases the unnecessary "firing" of the flexors/FDL, allowing manual stretching to achieve better results by straightening toes that are more curly than desired.

This is a classic case of a patient with flexible flatfoot who, as they begin to walk, has significant "firing" and overuse of the flexor tendons of the feet for stabilization. This issue, in this patient's case and with many digital deformities, is that the contracture will often not allow the "curling" of the toe to straighten out over time and in many cases will make the issue worse. The patient is an almost 1 year old who is now beginning to cruise. The patient's father has noticed that when he gets up and holds onto something that he will almost be able to stand for a brief time, however he sees a significant amount of toe contracture of the lesser toes of both feet. The patient's Dad especially sees the affected toe (3rd digit,) which is adductovarus and plantarflexed, flex even more to the point in which it curls under the foot. The patient will then turn his ankle and fall. Dad is concerned about this ankle collapse as well as concerned that the toe stretching exercises he does with him nightly will not work as well. Dad is "reverse stretching" the toe when he can so that to give the toe as much opportunity to straighten. Dad is aware that the curly toe may not fully "uncurl" but wants to do everything possible to help it while the child is flexible.

The child is dispensed littlesteps to stabilize the rearfoot (calcaneal valgus) so that the stabilizing lesser toe tendons do not have to over fire and increase/preserve the curly toe. Standing on the littlesteps there is noticeably less flexion contraction and a total removal of ankle instability. Videos and pictures are taken. littlesteps have a deep 30mm UCBL heel cup (to stabilize heel valgus) with a medial skive (to stabilize



the sustentaculum tali/STHO, medial and lateral longitudinal arch support and a lateral flange to cut down on abduction of the foot.

Picture #2 - flexible flatfoot stance



Picture #3 - curly toe with active flexor contracture/stabilization