Pronation Corrections - Varus Forefoot Posts

Information Provided By KevinRoot Medical



Varus Intrinsic

Balance forefoot to rearfoot in an inverted-forefoot foot impression

FUNCTION:

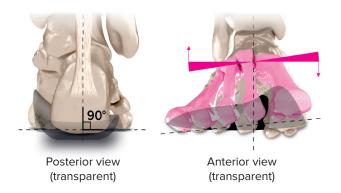
· Increasing medial arch height

CLINICAL INDICATION:

 Unbalanced clinical foot impressions with forefoot varus

The process of balancing a patient's forefoot to rearfoot begins with drawing a line that bisects the posterior distal achilles tendon along its sagittal plane on the positive foot model. The foot model is then placed on level surface with the calcaneus, 1^{st} and 5^{th} metatarsal heads plantigrade. The angle of the bisecting achilles tendon line is observed. If the bisecting achilles tendon line is everted away from 90 degrees vertical, the 1st metatarsal is elevated within the foot model, sometimes referred to as a forefoot supinatus. Balancing is achieved by adding artificial material to the 1st metatarsal effectively lowering the 1st metatarsal head thus stabilizing and balancing the forefoot, maintaining a vertical achilles bisection line while the three points of the plantar calcaneus, 1st metatarsal and 5th metatarsal are plantigrade. Artificial material (plaster or digital contour) is smoothed in a tapered fashion from the 1st metatarsal head to proximal base of the metatarsals. If Perpendicular is selected by the clinician, the rearfoot (vertical achilles bisection) will be leveled to perpendicular, and propping and balancing of the forefoot will effectively increase arch height and orthotic reaction forces. At the practitioner's discretion, this technique can be used to alter the contour of a patient's arch intrinsically by balancing forefoot to rearfoot at: 2°, 4°, 6° or 8° varus achilles bisection line, thus further propping or artificially plantar flexing the metatarsal head with artificial material. This effectively increases the arch height of the foot model and the congruent orthotic frame.

The pink colored metatarsals depicts the position of the inverted metatarsals in an impression or foot model before a forefoot to rearfoot balancing is achieved.



Notes: All illustrations and diagrams are of right foot Colors on illustrations are for visual purposes and will vary on final product ORF = Orthotic Reaction Force

