

Authors <i>Schuh & coll. (2010)</i>	
Study design	Prospective study.
Patients	29 patients with mild to moderate hallux valgus underwent Chevron osteotomy, were assessed. All wore Rathgeber shoe for four weeks postoperatively. All received therapeutic instructions and a special compression sock in order to manage the immediate postoperative period. At four weeks after surgery they received multimodal rehabilitation program including cryotherapy, lymphatic drainage, manual interventions of the first MTP joint, muscle stretching and gait training, once a week for three to six weeks.
Outcome measures	-Plantar pressure distribution parameters -AOFAS score -ROM of first MTP joint
Main results	Two patients were lost at the follow-up, the final sample was 27 people. <i>Increase in mean maximum force in the great toe:</i> -from 72.2 N preop. to 106.8 N at one year ($p < 0.05$). <i>Increase in mean contact area in the great toe:</i> -from 7.6 cm ² preop. to 8.9 at one year ($p < 0.05$). <i>Increase in mean maximum force in the first metatarsal head region:</i> -from 122.5 N preop. to 144.7 at one year. <i>Increase in AOFAS score:</i> -from 61 points preop. to 94 at final follow-up ($p < 0.001$). <i>Hallux valgus angle average measurement:</i> -from 31 degrees preop. to 9 degrees at one year ($p < 0.001$). <i>ROM average of the first MTP:</i> -from 14 degrees preop. to 6 degrees at one year ($p = 0.001$).
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Study design	Prospective study.
Patients	30 patients underwent the Scarf (n=10) osteotomy if intermetatarsal angle was more than 16 degrees and underwent Austin (n=20) osteotomy if it was less than 16 degrees. All complained of pain in the region of the first MTP joint preop. Postop. all were placed in the Rathgeber shoe for four weeks and received a special sock that reduce swelling. PR started four weeks after surgery. Elevation, lymphatic drainage, activation of the muscle pump and cryotherapy were used. The stance phase was trained followed by weight bearing of the first MTP joint during midstance and terminal stance. Selective strengthening of the peroneus longus muscle was performed. Manual treatment was focused on an improvement of flexion and extension of the first MTP joint including also mobilization of the Lisfranc, transverse tarsal, subtalar and ankle joints. All received a mean of 4.4 treatment session once a week for three to six weeks ranged from 35 to 45 minutes each.
Outcome measures	-Pedobarographic analysis preoperatively and four, eight weeks and six months after surgery. -Metatarsophalangeal-interphalangeal score of the AOFAS preop. and six months after surgery. -ROM measurement of the first MTP joint preop. and six months after surgery.
Main results	28 were available for follow-up. <i>Metatarsophalangeal-interphalangeal score of the AOFAS:</i> -From 60.7 to 94.5 at six months. <i>ROM of the first MTP joint:</i> -Mean dorsiflexion increased from 40.4 degree to 45.9 at six months. -Mean plantar flexion was 28.5 preop. and 27.4 at six months.

Table 3 Non experimental studies. (More on next page)

PR postoperative rehabilitation, **AOFAS** American Orthopaedic Foot and Ankle Score, **ROM** range of motion, **MTP** metatarsophalangeal, **kPa** kilopascal (Pa: unit of pressure = 1Newton/m²; 1kPa = 1 000 Pa), **CPM** continuous passive motion, **N** Newton.

Table 3 (continue)

Authors		Schuh & coll. (2008)
Study design		Prospective study.
Patients		33 patients with a mild to moderate hallux valgus deformity. 22 underwent Austin osteotomy and 11 Scarf osteotomy. Patients wore Rathgeber shoe for four weeks postoperatively. PR starts after four weeks.
Outcome measures		-Pedobarographic analysis at four, eight weeks and a six months. -AOFAS and ROM measurement of the first MTP joint prior the surgery and at six months postoperatively. -Pts satisfaction at six months.
Main results		<i>Increase in big toe pressure:</i> -after eight weeks from 80.7 kPa to 171.9 kPa -at six months postoperatively 336.1 kPa. <i>Increase in the first metatarsal head pressure:</i> -after eight weeks from 141.4 kPa to 215.8 kPa -at six months postop. 292.7 kPa. <i>AOFAS score :</i> -from 60.8 preoperatively to 94.0 at six months. <i>ROM of the first MTP joint:</i> -from 66° preop. to 70° at six months.
Authors		Connor and Berk (1994)
Study design		Descriptive study.
Patients		Ten patients in whom hallux limitus was observed after undefined hallux valgus surgery were evaluated with pain and stiffness of the first MTP joint. The patients starts CPM after six months from surgery. All were instructed to utilize CPM device at home for four hr. per day for 28 days. Three out ten patients required hallux limitus corrective surgery due to persistent pain and discomfort (they were excluded from the investigation).
Outcome measures		-ROM of the first MTP joint (flexion and extension) at 28, 48 and 90 days. -Weight bearing radiographs at the initial examination.
Main results		<i>Initial mean extension:</i> -32.5±7.8 degree. <i>Final extension:</i> -41.5±10.0 degree. <i>Initial mean flexion:</i> -2.5±2.5 degree. <i>Final flexion:</i> -6.0±3.7 degree.

Table 3 Non experimental studies. (Continued from previous page)

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