### Simoncini & coll. (2001)

**Study design**
Double blind study.

**Patients**
20 patients underwent undefined hallux valgus surgery who complained symptoms from about two years. Immediately after surgery, two magnetic bars were applied under the bandage creating a variable magnetic field of 100-150 G for 30 days. Patients were blind about the side in which magnetic bars were applied. These were put only in the right side being the left the control. After the first control at 30 days, shoes including magnetic bars (only in the right side) were dressed for more 30 days.

**Outcome measures**
- VAS at 2, 30, 60 days.
- Edema evaluation at 2 and 60 days.

**Main results**

**VAS right side:**
- 2 days: 8 pts.
- 30 days: 2 pts.
- 60 days: 1 pts.

**Edema right side:**
- 2 days: reduction of 0.5 cm in 12 patients
- 60 days: better function reduction in feeling of heaviness

**VAS left side (control):**
- 2 days: 8 pts.
- 30 days: 4 pts.
- 60 days: 3 pts.

**Edema left side (control):**
- 2 days: in 20 people there is no reduction
- 60 days: in 20 people feeling of heaviness persist.

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### Connor & coll. (1995)

**Study design**
Randomized controlled trial.

**Patients**
39 patients underwent Austin osteotomy. All were placed in walkers immediately after surgery and were instructed to ice and elevate their feet during the first 72 hrs. One group received physical therapy and continuous passive motion. The control group received physical therapy only. In the CPM group, treatment starts 24 hrs. after surgery for eight hrs. daily until the 24th day increasing ROM to 20° (flexion) and 65° (extension). All received 20-min hydrotherapy treatments three times weekly from second to fourth week.

**Outcome measures**

**ROM:**
- Measurements were taken on seven occasion and the initial was intraoperatively on the 7th, 14th, 21st, 28th, 60th and 90th days.
- Return to conventional shoes.

**Main results**

**ROM:**
- The group who received CPM had a significantly larger mean ROM (p <0.05) at every point thereafter.
- There was no significant difference between initial and final mean extension in the CPM group.
- There was significant difference between initial extension and final extension in the physical therapy only group (p <0.001).
- There was no significant difference between initial and final flexion in the two groups.
- The CPM group returned to wearing conventional shoes significantly earlier (p <0.001).

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**Table 2** Experimental studies.

PR postoperative rehabilitation, CPM continuous passive motion, ROM range of motion, G gauss (the unit of the magnetic flux density), VAS visual analogic scale.