

EpiTrain®

CONTROLLED TRIAL OF AN ELBOW SUPPORT IN PATIENTS WITH ACUTE PAINFUL CONDITIONS OF THE ELBOW: A PILOT STUDY

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Pain and movement restrictions affecting the elbow are often seen in patients who have overstrained themselves during sport or have had an accident in which they twisted their arm severely and/or hyperextended their elbow. The duration of the symptoms ranges from a few days to several weeks, with an average of two weeks. The study was conducted to measure the effect of EpiTrain in comparison with a standard support for the elbow.

METHODOLOGY

Randomized, controlled, two-arm clinical study

Sample: n = 35 (22 = male, 13 = female/19 = EpiTrain group; 16 = control group, Tubigrip), age: 40 (18–66) years, body weight: 76.5 (50–84 kg), height: 169 cm (156–183 cm)

Test support: EpiTrain elbow supports (Bauerfeind AG) and Tubigrip (Seton)

Test method: Test duration: 14 days; self-assessment by patients using patient diaries for recording information such as restricted function, ability to work, and feeling of pain using a VAS score for pain at rest, at night, and during movement. Measurement by the treating physician of active and passive joint mobility in degrees.

Inclusion criteria: Patients with active, recurring, and persistent elbow problems/pain

Exclusion criteria:

- Patients with arthritis and/or osteoarthritis
- Patients with chronic pain
- Patients with nerve disorders or bone injuries
- Patients with conditions affecting both elbows
- Patients who regularly take painkillers



EpiTrain®

Active support for targeted compression of the elbow

Source:

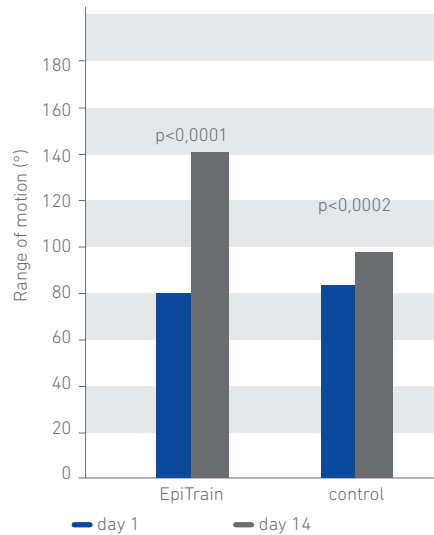
Valle-Jones J.-C., Hopkin-Richards H;
Controlled trial of an elbow support (EpiTrain) in patients with acute painful conditions of the elbow: a pilot study
Cum. Med. Res. Opin., 12, 224–233, (1990)

RESULTS

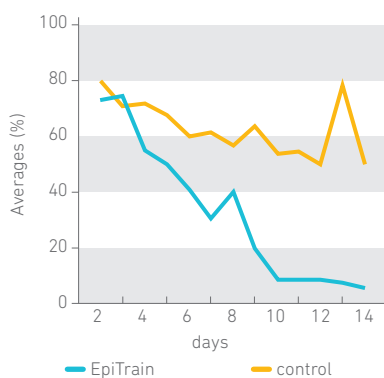
After 14 days, the pain felt by the group with EpiTrain had reduced by 50 units, in comparison with a reduction of only 19 units in the control group. The difference in pain reduction by the support is significant from day 6 to day 14 and can therefore be traced back to EpiTrain. The patients who were able to return to work with no restrictions increased from 47% at the start of treatment to 86% after 14 days in the EpiTrain group. In the control group, just 27% of patients were able to return to work with no restrictions at the start and 46% were able to do so after 14 days. The joint mobility measurements increased from an initial 80° to 141° in the EpiTrain group and from 83° to 98° in the control group. A significantly greater increase in mobility was demonstrated in the support group than in the control group.

- **EpiTrain significantly reduces elbow pain**
- **EpiTrain increases joint mobility**

Active joint movement



Feeling of pain during activity, Visual Analogue Scale (VAS)



Passive joint movement

