

ManuTrain®

ACUTE WRIST AND FOREARM COMPLAINTS; RAPID RETURN TO FITNESS WITH MUSCLE ACTIVATING SUPPORT

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Industrial mass production is often associated with working in set rhythms and performing stereotypical tasks, such as on the assembly line or other assembly activities. As with office work, this can lead to overloading and disorders of the muscles, tendons, and ligaments. In the case of predominantly manual activities, these problems are often localized in the wrist area or the distal forearm and range from significant pain during movement through to irritation or chronic tenosynovitis. The main question investigated in this study was whether the use of an anatomically shaped, knitted double-stretch support for wrist and forearm problems in a company health center showed any advantages over the "standard treatment" otherwise commonly used of applying antiphlogistic salves and compression and support bandages.



ManuTrain®

Active support for the wrist

METHODOLOGY

Study design:	Randomized, controlled parallel group study
Sample:	n = 84 (57 = ManuTrain group; 27 = control group)
Test support:	ManuTrain wrist support (Bauerfeind AG)
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. The control group was given a standard treatment (application of antiphlogistic salves in conjunction with an elastic bandage). The support group was given a wrist support. The investigation was performed in a large company in the metalworking industry.
Inclusion criteria:	• Patients with irritation and overloading (tendomyopathy) of the forearm and finger muscles and the tendons and ligaments • Wrist bruising, tenosynovitis (with some crepitus). Epicondylitis with an effect on the forearm and wrist area
Exclusion criteria:	Patients with suspected fractures, conditions after surgery in the wrist area less than six months ago

RESULTS

The statistical analysis revealed that the pain intensity data given by the patients in both groups was no different at the start of the study. Accordingly, any changes in this data must be seen to have a direct connection with the treatment. After two weeks of treatment, 61.4% of the support group described their pain as "much better." Meanwhile, 59.3% of the control group rated their pain levels as "unchanged." 18 patients in the support group had no pain after two weeks, as opposed to only 2 patients in the control group. It is worth noting that 33% of the patients in the control group were also assigned to an alternative workplace with a limited range of activities in addition to receiving treatment, while such a change in workplace was only necessary for 12% of the support group.

→ **ManuTrain reduces wrist pain**

→ **ManuTrain enables a quicker return to work**

Effect on complaints after two weeks of treatment (%)

