

POST-OPERATIVE TREATMENT OF A DISTAL RADIUS FRACTURE WITH THE ManuLoc® long ORTHOSIS

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INTRODUCTION

Distal radius fractures nearly always occur when patients put their hand out to cushion their fall. Symptoms include pain, especially when rotating the hand outward (supination) and rotating the forearm, loss of strength, sensation or function problems, or visible misalignment and/or swelling in the forearm.

METHOD (REFERENCE TO MVZ OBERSTDORF)

Between October 2015 and March 2016, 13 patients were supplied with the ManuLoc long orthosis on the first day after surgery to correct a distal fracture of the forearm. The patients were examined when they were discharged from hospital (second day after surgery), when they had their sutures removed (twelfth day after surgery), and after six weeks. X-rays were taken of the wrist during the first and third data collection appointments.

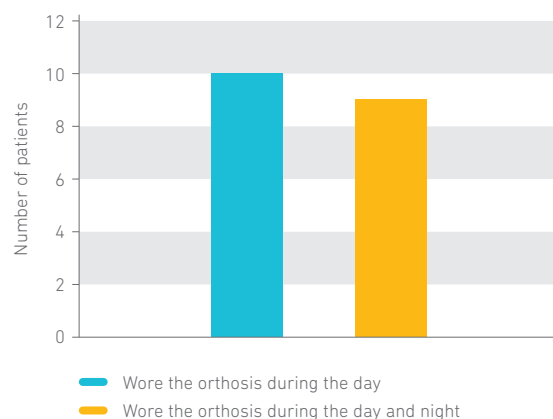
All patients were treated using palmar locking-plate osteosynthesis for distal forearm or radius fractures near a joint. Officially, patients were advised not to move their arm for two weeks. After two weeks

of uninterrupted immobilization of the affected arm, patients were allowed to exercise their arm without the splint. Patients were able to choose whether to continue using the splint.

The study recorded the patients' DASH score, the Mayo wrist score, pain sensation (VAS), patient rating of their general state of health (VAS), and their ability to work. In each case, data on how often the orthosis was worn, how easy the orthosis was to handle, how comfortable it was to wear, and how well it fit the patient and stabilized the arm was recorded. Patients were also asked about their use of painkillers and how well they felt the orthosis reduced pain.

RESULTS¹

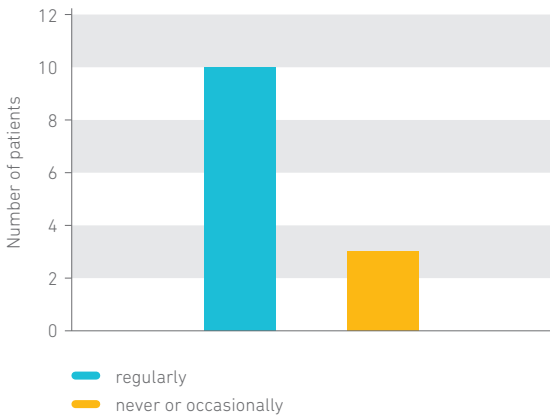
ManuLoc wearing period Time: six weeks after surgery



As it was so comfortable to wear, patients continued to wear the orthosis even after it was no longer required by their physician.

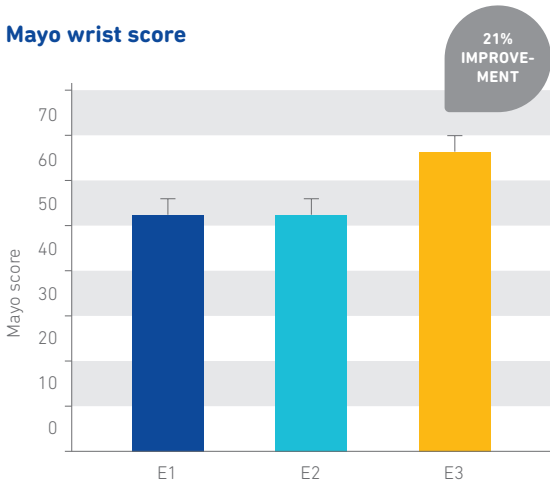
RESULTS

ManuLoc long compliance Time: six weeks after surgery

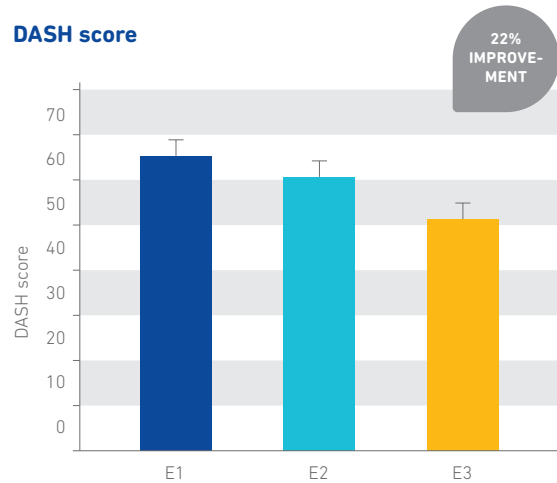


Nearly 80% of patients regularly wear the orthosis even after the six-week period as it stabilizes the arm well and is extremely comfortable to wear.

Mayo wrist score



DASH score



The Mayo and DASH scores improve over the course of the treatment with ManuLoc long, which corresponds to the healing process in treatment with a cast.

CONCLUSION

The ManuLoc long orthosis is an excellent tool for the post-operative treatment of distal forearm or radius fractures. As compared to immobilization in a cast, the ManuLoc long offers considerable advantages in terms of wearing comfort and fit. There is no need to change casts after surgery. The ManuLoc can also be easily adapted to suit soft tissue changes at no cost.

In most cases, the patients felt that the orthosis led to a significant pain reduction. The patients found it was pleasant to continue to wear the orthosis and it gave them more confidence to use the affected hand as it provides support and protects against further injury while rebuilding strength in the arm.