MULDERS ET AL.

VOLAR PLATE FIXATION VERSUS PLASTER IMMOBILIZATION IN ACCEPTABLY REDUCED EXTRA-ARTICULAR DISTAL RADIAL FRACTURES. A MULTICENTER RANDOMIZED CONTROLLED TRIAL

http://dx.doi.org/10.2106/JBJS.18.00693

Page 1

The following content was supplied by the authors as supporting material and has not been copy-edited or verified by JBJS.

Appendix 1. Exclusion criteria

- Patients with an unacceptable closed fracture reduction
- Multiple trauma patients (Injury Severity Score (ISS) ≥ 16)
- Patients with open distal radius fractures
- Other fractures of the affected extremity (except for a fracture of the ulnar styloid process)
- Patients with impaired wrist function prior to trauma (e.g. rheumatoid arthritis, neurological disorders or previous malunion of the affected limb)
- Patients suffering from connective tissue disorders or disorders of bone metabolism other than osteoporosis
- Patients judged by the treating physician as being unable to understand the study information and informed consent forms

MULDERS ET AL.

VOLAR PLATE FIXATION VERSUS PLASTER IMMOBILIZATION IN ACCEPTABLY REDUCED EXTRA-ARTICULAR DISTAL RADIAL FRACTURES. A MULTICENTER RANDOMIZED CONTROLLED TRIAL

http://dx.doi.org/10.2106/JBJS.18.00693

Page 2

	Included patients	Non-included patients
	N = 90	N = 198
Age (years)	59 [45.8–65.3]	60 [42.0–68.0]
Sex		
Female	67 (74%)	159 (80%)
Male	23 (26%)	39 (20%)
AO/OTA classification		
A2	23 (26%)	61 (31%)
A3	67 (74%)	137 (69%)

MULDERS ET AL.

VOLAR PLATE FIXATION VERSUS PLASTER IMMOBILIZATION IN ACCEPTABLY REDUCED EXTRA-ARTICULAR DISTAL RADIAL FRACTURES. A MULTICENTER RANDOMIZED CONTROLLED TRIAL

http://dx.doi.org/10.2106/JBJS.18.00693

Page 3

	Operative group	Non-operative group	P Value
6 weeks			
DASH	22.5 [14.2–35.8]	48.3 [35.6–57.7]	< 0.001+
PRWE	29.0 [18.5–48.5]	55.8 [40.9–70.9]	< 0.001+
3 months			
DASH	6.7 [2.5–18.3]	27.5 [10.0–38.3]	< 0.001+
PRWE	11.0 [4.0 – 22.5]	32.5 [12.0–50.0]	< 0.001+
6 months			
DASH	5.8 [0.0–17.5]	14.2 [7.9–29.6]	0.004†
PRWE	7.0 [3.0–29.0]	20.0 [7.5–45.8]	0.008†
12 months			
DASH	2.5 [0.0–12.7]	9.2 [1.7–17.7]	0.018†
PRWE	4.0 [0.0–12.6]	10.0 [3.0–27.0]	0.015†

MULDERS ET AL.

VOLAR PLATE FIXATION VERSUS PLASTER IMMOBILIZATION IN ACCEPTABLY REDUCED EXTRA-ARTICULAR DISTAL RADIAL FRACTURES. A MULTICENTER RANDOMIZED CONTROLLED TRIAL

http://dx.doi.org/10.2106/JBJS.18.00693

Page 4

Appendix 4. Difference in patient-reported outcome measures between patients treated non-operatively without subsequent surgery (N=25) and patients treated operative primarily (N=47)* **Operative treatment** Non-operative treatment P Value without subsequent surgery 6 weeks DASH 22.5 [14.2-35.8] 46.3 [34.4-64.0] < 0.001 + PRWE 29.0 [18.5-48.5] 57.0 [32.6-71.5] < 0.001 + 3 months DASH 6.7 [2.5–18.3] 27.5 [9.2-33.9] < 0.001 + PRWE 11.0 [4.0-22.5] 29.5 [12.3-48.3] 0.004^{+} 6 months DASH 5.8 [0.0–17.5] 14.2 [8.3–27.5] 0.028+ PRWE 7.0 [3.0-29.0] 20.0 [9.0-45.5] 0.028† 12 months 2.5 [0.0–12.7] DASH 9.2 [1.0-15.6] 0.112 4.0 [0.0–12.6] PRWE 8.0 [3.0–19.1] 0.064 *Values are given as the median with the IQR in brackets. All patient-reported outcome measures are corrected for age. †Significant.

MULDERS ET AL.

VOLAR PLATE FIXATION VERSUS PLASTER IMMOBILIZATION IN ACCEPTABLY REDUCED EXTRA-ARTICULAR DISTAL RADIAL FRACTURES. A MULTICENTER RANDOMIZED CONTROLLED TRIAL

http://dx.doi.org/10.2106/JBJS.18.00693

Page 5



Appendix Figure 1a. Dorsally displaced extra-articular distal radius fracture

MULDERS ET AL.

VOLAR PLATE FIXATION VERSUS PLASTER IMMOBILIZATION IN ACCEPTABLY REDUCED EXTRA-ARTICULAR DISTAL RADIAL FRACTURES. A MULTICENTER RANDOMIZED CONTROLLED TRIAL

http://dx.doi.org/10.2106/JBJS.18.00693

Page 6



Appendix Figure 1b. Same fracture after acceptable closed reduction and immobilization with a plaster