

EXTRACORPORAL SHOCKWAVE THERAPY IN CALCIFYING TENDINITIS OF THE ROTATOR CUFF

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Fig. 1: Calcifying tendinitis stage Gaertner 2, size Bosworth II°

Introduction: Extracorporeal shockwave therapy (ESWT) has been applied for calcifying tendinitis (CT) since 10 years. Since 2000 a new ballistic principle of ESWT, the so called radial shock wave therapy (RSWT) has been introduced. The aim of the study is to evaluate the efficacy of ballistic ESWT in the treatment of the CT of the RC.

Material & Methods: Between 2000 and 2002 35 patients (23m/12f) with a mean age of 47.5 years (33-73y) suffering from CT of supraspinatus tendon stage Gaertner 2, size Bosworth II°-III° for a mean of 28 months (6-120 mo) were treated with RSWT.



Fig. 2: Radial shockwave therapy

All patients were clinically and radiologically followed-up using the Constant-Score, 4 weeks, 3, 6 and 12 months after the last treatment.

Results: The Constant-Score improved significantly ($p < 0.0001$) during the first 4 weeks after RSWT, 80% of the patients reported about pain relief within the first 4 weeks, 81% had no pain and 75% of the calcific deposits were completely resorbed 12 months after RSWT (s. table 1, fig. 3, 4):

Constant-Score	1 month	3 months	6 months	12 months
Total (pts)	80.5	74.7	78.9	79.7
Subjective pain assessment				
persistent pain (%)	19.9	35.7	14.8	0
pain relief (%)	54.3	14.3	25.9	19.2
No pain (%)	25.7	50	59.3	80.8
Radiological assessment of CD				
unchanged (%)	61.8	48.3	30.4	25
complete resorption (%)	17.6	44.8	65.3	75

Tab. 1: Functional and radiological results after RSWT

Overall 3P (8.5%) had to undergo a surgical treatment 3-7 months after RSWT.

Conclusion: RSWT for CT leads within 4 weeks to an improvement of shoulder function and in the course of 3 months to a significant improvement of pain. In consideration of the long history and the size of the CD, RSWT seems to lead to an effective healing.

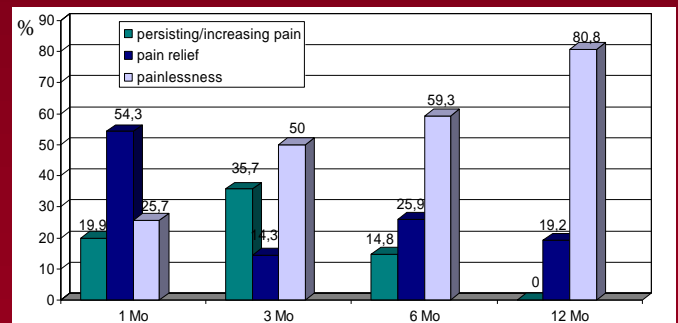


Fig. 3: Pain relief after RSWT

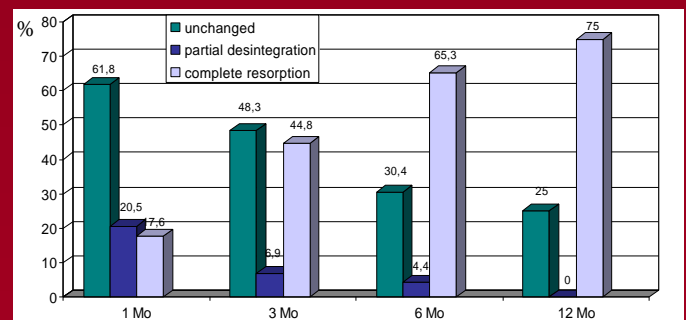


Fig. 4: Changes of calcific deposit after RSWT