

## **(5)Efficiency of shockwave treatment for pain reduction in the shoulder**

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**Introduction:** From 2006 – 2009, shockwave therapy was performed in the Trauma Hospital of Graz on patients with pain in the shoulder. Patient complaints were pain when raising the arm higher than 60° and pain during the night with trouble of continuous sleep. The aim of this study was to evaluate the rate of success and to detect any hints for predictable success of this treatment.

**Methods:** Patients suffering from tendinitis of the rotator cuff tendon (n=42) with or without calcification were treated. 86% patients (n=36) were available for follow up. Shockwaves were applied using an Orthowave 180 shockwave machine. Each patient received 2000 - 2500 impulses under general anesthesia.

**Results:** Post treatment evaluation included measurement of ROM and additional assessment of the patients condition. Therefore we created four categories ranging from success to impairment. 64% showed complete success with pain relief ranging from immediate to 4 months after treatment. 11% of patients continued to have painful restrictions but nightly pain attacks disappeared. No improvement could be achieved in 25%. These patients ultimately underwent surgery after additional treatment. Impairment of the situation was not observed in any subject.

**Discussion:** Although we received a high rate of success (75%), we could not find any parameters which can predict the success of the treatment.

**Conclusion:** In summery, the collected data on this topic explicitly proves that shockwave therapy can substitute surgery. Due to pain relief, the quality of life can be improved.

**Device and producing company:** Orthowave 180, MTS Europe