

# Radial or Focused Shockwave Biosurgery In Lateral Epicondylitis?

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In this review we present our case series of RSWT and compare them with our 2003 Focused Shockwave Bio surgery results.

In 134 cases of lateral epicondylitis treated with RSWT we used a two-session protocol with 4,000 shockwaves progressing from less than 2 Bar ( $<0.06\text{mJ}/\text{mm}^2$ ) and 10Hz to 4bar ( $0.18\text{mJ}/\text{mm}^2$ ) and 4Hz, without anaesthesia. We evaluated patients at three, six and twelve months with VAS, ASES-e score, and the ability to return to sports.

After three months 97 patients showed a VAS pain reduction of 68%, 62% returned to sports at a similar level, 32% at a lower level, and 6% had persistent pain. Sixty-five percent had good or excellent functional scores. After twelve months, 89 patients showed a VAS pain reduction of 61%, 70% returned to sports at a similar level, 26% at a lower level and 4% had persistent pain. No patients required surgery, and the functional scale analysis improved to 84% with good or excellent results.

Similar results were reported after one year for both types of shockwaves. We found some differences:

ESWT allowed a shorter treatment time, a variation in energy and frequency, and the ability to quickly change the point of application. Treatment with focused shockwaves is better for immediate pain relief, is a hand-free procedure for the operator, and patients feel they are receiving more an orthopaedic procedure rather than physical therapy. Economic issues are beyond this paper. Having both devices allows our unit to use Shockwave Bio surgery in a wide variety of applications.