

Focused Shock Waves in the Treatment of the Sesamoiditis of the Hallux

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Sesamoiditis is usually present as pain in the plantar base of the first metatarsal, and is often a hidden and ignored pathology.

From September 2004 to February 2005, 44 patients (73% male, 27% female) with an average age of 47 years (range 19-57) with a diagnosis of sesamoiditis were included in the study. Fifty-four percent had sesamoiditis associated with proximal plantar fasciitis and 18% had sesamoiditis associated with hallux valgus. Forty-five percent were active athletes. Patients received ESWT with a focused Orthospec (Medispec) generator, at 0.08-0.16 mJ/mm² with 120 shockwaves/minute in a single session. Follow up was done by analyzing clinical and radiological variables, VAS, gait foot-takeoff analysis, tolerance to mobility and patient's satisfaction. Patients were followed up with every six weeks for a nine month period. Descriptive and inferential statistical analyses were performed, as well as coefficients of correlation and Chi Square analysis, with a significance level of 0.05. We used the beginning of analgesia as a primary variable for evaluation.

Our results showed that the beginning of analgesia was achieved with an average of 494 shockwaves. The average total number of shockwaves per treatment was 930. After a 9-month follow up our patients showed 82% excellent/good results (n=26), 9% fair (n=4), and 9% poor (n=4). VAS showed statistically significant differences, with a variation between initial and end values of $p=0.024$ and association VAS End satisfaction level $p=0.000$.

Our results showed a significant improvement in both pain control and patient satisfaction in sesamoiditis treatment, however further studies are necessary to determine a final protocol.