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Abstracts

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OUR EXPERIENCE IN THE TREATMENT OF TENDINOPATHIES WITH SHOCKWAVE THERAPY

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We have been treating 41 patients affected by tendon derangement in different locations. Admission criteria for this study were: age between 20 and 65, complaints lasting more than 6 months, at least 2 unsuccessful courses of conventional therapies, incipient indication for surgery. Exclusion criteria were: specific therapy over the past 14 days, pregnancy, coagulation disorders.

Patients were treated for a minimum of 3 and a maximum of 4 sessions. 2000 impulses each. The energy flow density during treatment was equal to a working pressure of 2 bar. Treatment frequency was 5Hz in multiple shock mode. We never used local anaesthesia. We employed a device consisting of an air pressure supplied control unit (5-6bar), at handpiece with a 6 mm applicator (Swiss Dolor Clast).

Patients were evaluated 3 weeks and 2 months after treatment. We used the analogical-visual scale of pain intensity as subjective evaluation, considering optimum/good values between 0-3, fair 4-6, unsatisfactory 7-10. By an objective point of view, we matched x-rays performed before treatment with those performed 3 weeks after treatment. We treated 21 tendinosis calcarea of shoulder tendons. 9 epicondylitis humeri, 3 heel spurs, 2 plantar fascitis, 3 Achille's insertional, 1 patellar and 1 femural biceps tendinopathies, 1 wrist stiloiditis.

Results were as follows:

	optimum / good	%	fair	%	unsatisfactory	%
Shoulder	17	81	2	9,5	2	9,5
Elbow	3	33	2	22	4	45
Achilles-patellar tendon	1	25	2	50	1	25
Heel spur	2	66	1	33	0	
Plantar fasciitis	1	50	0		1	50

We observed side effects such as local irritation, petechia, hematomas, swelling and increase in pain 24-36 hours after treatment. Only in 1 patient the suspension of treatment was required. By the radiographic point of view, we observed the entire or nearly entire disappearance of the calcifications in the treated shoulder with an improvement of clinical symptoms.

In conclusion, we can adfirm that this kind of shock wave therapy was very useful in calcarea tendinosis because of the elimination/reduction of calcification/s with satisfying clinical results, while in insertional tendinopathies without calcification the results were not long lasting