

# Treatment of Jumper's Knee with Extracorporeal Shock Wave Therapy

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Jumper's knee affects mostly individuals who play sports particularly jumping athletes. In this study we have included 73 sports patients, 54 male and 19 female, age range between 15 and 69 (mean age: 32).

Since 10 patients were affected by bilateral tendinopathy, a total of 83 tendons were treated.

All patients underwent clinical and instrumental diagnosis in order to recognize the presence, the location and the seriousness of the specific tendinopathy associated or not with calcific areas of metaplasia in the tendon to be diagnosed. The pain symptomatology was classified using VAS and according to a 5 stage clinical evaluation range. The treatment was performed using 2 different devices, produced by STORZ, both equipped with electromagnetic generators with cylindrical coil and providing ultrasonography capability. The protocol, identical for both generators, called for an average of 4 sessions (min. 3 - max. 5), administered in 2 to 7-day time intervals with 1,500-2,500 shocks applied with an EDF between 0.08 and 0.44 mJ/mm<sup>2</sup>.

The evaluation of the post-treatment results was assessed on the basis of the average VAS score and on the subjective clinical evaluation range. In conclusion, we obtained satisfactory results in 73.5% of cases (Excellent in 54.2% and Good in 19.3%). The successful treatment in performing athletes (16 tendons) was satisfactory in 87.5% with an average time of resuming sport at approximately 6 weeks.

In our opinion, shock waves are a valid conservative therapy for the treatment of jumper's knee, in accordance with what is found in literature.