

REDUCING PAIN AND IMPROVING FUNCTIONAL ABILITY AND QUALITY OF LIFE WITH APPLICATION OF RADIAL EXTRACORPOREAL SHOCK WAVE THERAPY IN PATIENTS WITH KNEE OSTEOARTHRITIS

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Background and Aims

Background: Knee osteoarthritis is a musculoskeletal disorder that leads to reduced functional ability and quality of life of the patients. Radial extracorporeal shockwave therapy (RECTUB) has been proposed as a safe, non-invasive, alternative conservative treatment for knee osteoarthritis. Aims: to prove the effect of RECTUB in improving the quality of life in patients with knee osteoarthritis

Methods

Methods: The study represents prospective, monocentric, interventional, non-randomized clinical study of 40 RECTUB treated patients (totalling 5 weekly sessions with 5-minute application of 2000 impulses, 2 Bar intensity, 10 Hz frequency at painful knee points) and kinesitherapy. The patients' progress was monitored on the Numeric scale of pain, the WOMAC Index and Short Form 36 Health Survey Questionnaire. The clinical findings were evaluated before the treatment started; immediately after its completion and 3 and 6 months afterwards.

Results

Results: Regarding the NSP scored a mean of 7, 4, 2, and 2, respectively, before treatment and at the three follow-up examinations after treatment. It was found that patients had reduced pain intensity was maintained even for 6 months after the applied physical treatment. Statistically significant differences were found of the total WOMAC index and its three subscales at the end of the first, second and third control. The three subscale WOMAC index median was 9, 4, 2, and 2 respectively for subscale 1; 3 and 0 for subscale 2; 34.5, 12.5, 7.5 and 8 at baseline and the three follow-up examinations and subscale 3 respectively, at the beginning and the three follow-up examinations. Regarding the SF-36 Questionnaire, it was shown that the patients had significantly better values for the quality of life in terms of physical functioning, and their general health rated as good.

Conclusion

The study proved that treatment with RECTUB led to improved functional ability and quality of life in patients with knee osteoarthritis.

Keywords: osteoarthritis, shock, wave, therapy