ESWT (extracorporeal shockwave therapy) for osteoarthritis of the knee

Ching-Jen Wang
Kaohsiung Chang Gung Memorial Hospital and Chang Gung University, Taiwan
Email: cjwang1211@gmail.com

Hypothesis

ESWT (extracorporeal shockwave therapy) is shown to have chondroprotective effects in the initiation of osteoarthritis changes of the rat knee. It is hypothesized that the effects of ESWT may be similar in human knees.

Objectives:

To evaluate the the effects and safety of ESWT in early osteoarthritis of human knees.

Methods

ACLT induced OA knee model was used in this study. A clinical trial including 45 patients was performed in this study. Application of ESWT was performed on medial aspect of the knee joints. The control group consistent of oral diclofenac and intraarticular HA injection. Evaluations included pain scores, functional scores, knee scores, radiographs, BMD and MRI of the knee.

Results

In clinical trials, comparions were performed to compare the efficacy and safety of ESWT, intrarticular hyalunonic acid (HA) injection and oral diclofenace for early OA knee. The preliminary results showed intermittent pain relief with diclofenac group. The ESWT and HA injection groups demonstrated compatible improvement in knee symptoms, however, very little differences were notice between ESWT and HA group.

Conclusions

In conclusion, ESWT is effective for the treatment of early osteoarthritis of the knee with comparable results as HA injection to the knee. ESWT can be used as the initial treatment of choice in early knee arthritis.