Orthopedics & Rheumatology-2013
OMICS Group Conferences
Accelerating Scientific Discovery
2nd International Conference and Exhibition on
Orthopedics & Rheumatology
August 19-21, 2013 Embassy Suites Las Vegas, USA

Long-term outcomes of shockwave therapy and core decompression in the treatment of osteonecrosis of the femoral head with 8 to 9 years follow-up

Ching-Jen Wang

Kaohsiung Chang Gung Memorial Hospital, Taiwan

Abstract

Core decompression is considered the gold standard for symptomatic early osteonecrosis of femoral head (ONFH). However, prior study showed that extracorporeal shockwave therapy (ESWT) is more effective than core decompression with non-vascularized fibular graft (NVFG) in early ONFH.. This study analyzed the long-term outcomes with 8 to 9 years follow-up. **Methods:** A cohort consisted of 23 patients (29 hips) in ESWT group and 25 patients (28 hips) in surgical group. Both groups showed similar demographic characteristics. Patients in ESWT group received shockwave treatment to the affected hip. Patients in surgical group underwent core decompression and (NVFG). The average follow-up was 104±3.4 months for ESWT group and 105±4.3.months for surgical group. The evaluations included clinical assessment for pain score and Harris hip score, plain radiograph and MRI of affected hip. **Results:** The overall outcomes showed good or excellent in 76% and 21%, and fair or poor in 24% and 79% for ESWT and surgical group respectively at 8 to 9 years follow-up. THA was performed in 3% and 21% (P = 0.039) at one year, 10% and 32% (P = 0.044) at 2 years and 24% and 64% (P = 0.002) at 8 to 9 years for ESWT and surgical group respectively. There was a trend of decrease in the size of the lesion and bone marrow edema after ESWT. **Conclusion:** ESWT is more effective than core decompression and bone grafting for early stage ONFH, and the superior effect of ESWT persisted with 8 to 9-years follow-up.

Biography

Ching-Jen Wang, M.D. graduated from National Taiwan University, College of Medicine. He is a board certified orthopedic surgeon and currently holds a clinical faculty at Chang Gung University College of Medicine and serves as a consultant orthopedic surgeon of Kaohsiung Chang Gung Memorial hospital, Taiwan. He has published more than 185 papers in reputed journals and has been serving as the reviewer in many journals. His primary interest and area of expertise include sports medicine, knee and hip replacement surgery, shockwave medicine and tissue regeneration.