



PERFORMING ARTS

SPECIAL INTEREST GROUP



ORTHOPAEDIC SECTION
AMERICAN PHYSICAL THERAPY ASSOCIATION



BONE STIMULATION – CITATION SUMMARY

APRIL, 2008

Nonunion fractures and avascular necrosis can be particularly devastating for a dancer or athlete. Surgical options include excision or open surgical debridement with internal fixation and bone grafting. There are alternatives to conventional bone-graft surgery. Both electrical and low intensity ultrasound bone stimulators have demonstrated effective acceleration of bone healing. However, the majority of this research has focused on fresh fractures, arthodesis, and non-union fractures of long bones (e.g. femur, tibia, fibula, metatarsals, radius). We have had good experiences in the treatment of two dancers using an inductive coupling bone stimulator with pulsed electromagnetic field for a nonunion lateral sesamoid fracture and for a nonunion tibial fracture.

[Return to Menu](#)