

Is it possible to treat non-unions with radial shock wave therapy?

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Device and producing company:

Dolorclast, EMS

Introduction:

The treatment of delayed unions or non-unions with focused ESWT is a common option for these difficult pathologies. The use of Radial ESWT is indicated for soft tissues tendinopathies. We treated some superficial bones with delayed unions with radial shock waves due to economic constraints.

Methods:

We performed the treatment as an outpatient procedure without anaesthesia, using X-rays for targeting. We performed 3 sessions with 3000 pulses at 0.2 mJ/mm². We treated 2 tibias, 2 metatarsal bones, one distal femur and 2 scaphoids.

Results: After 6 months we observed bony consolidation in six out of seven cases.

Discussion: Radial ESWT is typically not used for bone injuries, but in our opinion, it is a new indication for some very specific cases. More clinical experience is necessary to draw further conclusions.

Conclusion:

Radial ESWT is effective for treatment of superficial bone delayed unions.