

Shock waves as therapeutic possibility in Reflex Sympathetic Dystrophy

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Algodystrophy, Reflex Sympathetic Dystrophy, Bone Marrow Edema, Transient Osteoporosis and Complex Regional Pain Syndrome are probably different terms of the same pathology due to a vascular disturbance of bone : pathogenetic mechanisms are not totally clear but a disorder of the sympathetic regulation of micro vessels is involved certainly. The evolution is not foreseeable: many cases have a spontaneous resolution within six months but some cases are the onset of a necrotic lesion. Authors show some cases of R.S.D. of the hip and of the leg treated with shock waves and they emphasize the importance of correct criteria of inclusion (only cases in stage I according to the M.R.I. classification of Grimm: diffuse edema of bone with low signal in T1 and high signal in T2). Their protocol of treatment consists in two sessions of shock waves in the opposite direction with interval of two days, 3000 shots and 0,30-0,40 mj/mm² of energy flux density. In all 50 cases Authors have recorded a reduction of pain within one month and a complete recovery of M.R.I. signal within three months. Authors analyze possible mechanisms of action of shock waves more supporting the "reset" of sympathetic disorder of micro circle and the effects of nitric oxide.