

Non-Operative Treatment of Pseudoarthrosis with PEMF after lumbar spine fusion surgery

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We studied 100 patients in whom symptomatic pseudarthrosis had been established at more than 9 months after lumbar spine fusion. All patients were treated with a pulsed electromagnetic field device worn consistently 2 hours a day for at least 90 days. Solid fusion was achieved in 67% of patients. Effectiveness was not statistically significantly different for patients with risk factors such as smoking, use of allograft, absence of fixation, or multilevel fusions. Treatment was equally effective for posterolateral fusions (66%) as with interbody fusions (69%). For patients with symptomatic pseudarthrosis after lumbar spine fusion, pulsed electromagnetic field stimulation is an effective nonoperative salvage approach to achieving fusion.