Efficacy of spinal cord epidural electrical stimulation in gait recovery of Spinal Cord Injury patients, a systematic review of human clinical trials

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Abstract

After using epidural electrical stimulation to reduce spastic pains in spinal cord injury sufferers from long ago, more recently the possibility of its usage in improving motor abilities has been proposed and shown in some human clinical trials. This systematic review searches 4 important databases including PubMed, Embase, Scopus and web of science in compliance with the PRISMA guidelines to find relevant human clinical trials and extract their data to get the most accurate conclusion and possibly consider the use of epidural electrical stimulation more seriously and extensively to help spinal cord injury patients struggling for their most basic skills. We concluded that epidural electrical stimulation has had notable effect on regain of walking even in those with chronic complete paralysis.

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