

Limited evidence for effectiveness of electromechanical and robot-assisted arm training after stroke

Clinical question	How effective is electromechanical and robot-assisted arm training for improving activities of daily living after stroke?
Bottom line	Patients who receive electromechanical and robot-assisted arm training after stroke are not more likely to improve their activities of daily living, but arm motor function and strength of the paretic arm may improve. It is, therefore, not clear if such devices should be applied in routine rehabilitation, or when and how often they should be used.
Caveat	These results must be interpreted with caution because there were variations between the trials in the duration, amount of training and type of treatment, and in patient characteristics.
Context	The role of electromechanical and robot-assisted training for improving arm function after stroke is unclear. More than two-thirds of all patients after stroke have difficulties with reduced arm function. Electromechanical and robot-assisted arm training uses specialised machines to assist rehabilitation in practice.
Cochrane Systematic Review	Mehrholz J et al. Electromechanical and robot-assisted arm training for improving arm function and activities of daily living after stroke. Cochrane Reviews 2008, Issue 4. Article No. CD006876. DOI: 10.1002/14651858.CD006876.pub2. This review contains 11 trials involving 328 participants
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[References]

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