

Other

Article 23

Rehabilitation of Lower Limb Amputees in the VA Acute Setting: Impact of Clinical Guidelines

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Objective: To 1) describe utilization of rehabilitative services in the acute care setting by persons who underwent major lower limb in Veterans Affairs (VA) Medical Centers from 2005 to 2010; 2) identify factors associated with receipt of rehabilitation; and 3) examine impact of the VA/DoD Clinical Practice Guideline on Rehabilitation of Lower Limb Amputation.

Design: Observational study. Separate multivariate logistic regressions were used to identify factors associated with service receipt and examine impact of Guideline implementation.

Setting: Secondary analysis of data from main and surgical inpatient datasets and inpatient encounters files of the Veterans Health Administration databases.

Participants: 12,599 patients, who underwent major surgical amputation of the lower limb at a VA medical center from January 1, 2005 to December 31, 2010.

Interventions: The VA/DoD Clinical Practice Guideline for Rehabilitation of Lower Limb Amputation was published in 2007.

Main Outcome Measure(s): Rehabilitation services were categorized as physical therapy (PT), occupational therapy (OT), and either (any therapy), before or after amputation.

Results: Patients were 1.45 and 1.73 times as likely to receive pre-operative PT and OT, and 1.68 and 1.79 times as likely to receive post-operative PT and OT ($p < 0.0001$) after Guideline implementation. Patients in the Northeast had the lowest likelihood of receiving pre-operative and post-operative rehabilitation services, while patients in the West had the highest likelihood. Other patient characteristics associated with service receipt were identified.

Conclusions: Findings suggest that further quality improvement efforts are needed to standardize delivery of rehabilitation services for Veterans with amputations in the acute care setting.

Key Words: Amputation, Lower Limb, Veterans, Administration, Rehabilitation.

Disclosure: Linda Resnik has nothing to disclose.

Article 24

Selective tibial neurotomy as a treatment for spastic foot: a randomized, assessor-blinded, controlled trial

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Objective: To evaluate the efficacy of selective tibial neurotomy in the treatment of spastic equinovarus foot by comparing it with botulinum toxin injections. Selective neurotomy consists in a partial section of the motor nerves innervating spastic muscles and is considered as a permanent treatment of focal spasticity.

Design: Randomized, assessor-blinded, controlled trial with a 6 months follow-up.

Setting: Spasticity group in 2 university hospitals.

Participants: A total of 16 post-stroke patients suffering from a spastic foot improved after diagnostic nerve block with anaesthetics

Interventions: A selective tibial neurotomy (8 patients) or botulinum toxin injections (8 patients) performed at the level of the soleus, tibialis posterior and flexor hallucis longus motor nerve branches or muscles.

Main Outcome Measure(s): Body structures and functions (Modified Ashworth Scale MAS, Tardieu scale, L-path, MRC scale, passive ROM, 10-m walking test, instrumented gait analysis), activities (FAC, FWC, ABILOCO), participation (SATIS-Stroke) and quality of life (SF-36) were evaluated in both groups by a blind assessor before, 2 months and 6 months after the treatment.

Results: In comparison with botulinum toxin injections, selective tibial neurotomy induced a higher reduction in soleus spasticity assessed by MAS and L-path. Both treatments provided a comparable improvement of ankle kinematics during gait, whereas none of them induced significant muscle weakening. Activities, participation and quality of life were not significantly modified in both groups.

Conclusions: This study demonstrates with a high level of scientific evidence that selective tibial neurotomy is an efficient treatment of spastic foot, reducing impairments of chronic stroke patients.

Key Words: spastic equinovarus foot, selective tibial neurotomy, focal spasticity

Disclosure: Thierry Deltombe has nothing to disclose.