



Title A Systematic Review of Clinical Predictors of Outcomes

in Adults with Recent Lower Limb Amputation

Agency VATAP, VA Technology Assessment Program

Office of Patient Care Services (11T), Room D4-142, 150 S. Huntington Avenue, Boston, MA 02130, USA;

Tel: +1 857 364 4469, Fax: +1 857 364 6587; vatap@med.va.gov , www.va.gov/vatap

Reference VA Technology Assessment Program Short Report, February, 2005. www4.va.gov/

VATAP/docs/ClinicalPredictorsAdultsOutcomesLowerLimbAmputation2005tm.pdf

Aim

To identify clinical predictors of outcomes in adult patients with major lower limb amputation that may help direct healthcare resources toward individuals who are most likely to benefit from specific rehabilitative interventions.

Conclusions and results

Predictors of poor outcome were advancing age, poor compliance, phantom limb pain, and comorbid conditions. Predictors of positive outcome included the patient's general condition, preamputation functional capability, the patient's socioeconomic situation, the amputation level and covering of the stump, and the absence of stump pain. These predictors need to be confirmed and assessed in VA patients to determine the most suitable outcomes to use for veterans with major lower limb amputation.

Recommendations

Promising predictors of outcomes were identified for further study. Additional research is needed to confirm these predictors and determine which predictors are most useful in clinical practice.

Methods

A qualitative systematic review was undertaken. Comprehensive searches were conducted in MEDLINE, EMBASE, Current Contents, Science Citation Index on Dialog, and the Cochrane Library from 1990 to February 2004. The bibliographic search strategy included terms for lower limb/extremity amputation and combined them with terms for rehabilitation, prognosis, recovery of function, quality of life, activities of daily living, treatment outcome, and analytic methods. These searches yielded 581 references of which 128 were identified as potentially relevant. Seven studies met the inclusion criteria for clearly described, original, research published in English that used multivariable analysis to derive predictive factors in adult patients with lower extremity amputation.

Further research/reviews required

Additional longitudinal studies are needed to derive a comprehensive set of clinical predictors suitable for the veteran population. These predictors will be used to improve the quality of rehabilitation care for lower limb amputees.