

Long-term clinical outcomes of Iranian veterans with unilateral transfemoral amputation (Review)

Ebrahimzadeh, M.H.^a, Fattahi, A.S.^b

^a Orthopedic Research Center, Ghaem Hospital, Mashad University of Medical Sciences, Ahmad-abad Street, Mashad 91176-91199, Iran

^b Department of Surgery, Ghaem Hospital, Mashad University of Medical Sciences, Mashad, Iran

[View references \(^ ^\)](#)

Abstract

Aim. To study long-term outcome of unilateral above-knee amputation. **Objective.** Long-term clinical symptoms and functional status of above-knee amputees are not well documented. The purpose of this study was to document the long-term outcome of war related above-knee amputations. **Context.** The study consisted of a comprehensive assessment and examination and review of history and wartime medical records of 31 Iranian above-knee amputees from the Iraq-Iran war by using a detailed questionnaire. The average follow-up was 17.0 years (range from 10 to 22 years). All patients were males and had been combatants. **Results.** The most common agent of war injury was a shell with an incidence of 40.0%, while land mines and direct bullet shots were the following causes of war injury resulting in amputation in 41.9% and 12.9%, respectively. Clinical symptoms included phantom sensation in 27 patients (87%), phantom pain in 14 patients (45.2%), phantom movement in 0 patients (0%), stump pain in 20 patients (64.5%). Additionally, 19 patients (61.3%) suffered from back pain, 17 patients (54.8%) complained of contra lateral (non-amputated) knee pain and 4 patients (12.9%) complained of ipsilateral hip pain. Seventeen patients (54.8%) reported psychological problems. Eighteen cases (58%) were employed or had been employed for multiple years after amputation. All patients (100%) were married and 20 (64.5%) had offspring. **Conclusions.** The study showed that our patients had significant rates of amputation symptoms after an average of two decades of amputation, but on the other hand good family and social function of the patients were recorded. Amputation is not a static disability but a progressive deteriorating condition that affects the health condition of the amputee over time. © 2009 Informa UK Ltd All rights reserved.

Author keywords

amputation; back pain; functional status; landmine; phantom pain; phantom sensation; PTSD; stump pain; War injury

Indexed Keywords

EMTREE medical terms: adult; agnosia; amputation; amputation stump; article; comorbidity; disabled person; female; human; Iran; Iraq; leg injury; limb prosthesis; male; posttraumatic stress disorder; psychological aspect; treatment outcome; veteran; war

MeSH: Adult; Amputation; Amputation Stumps; Amputees; Artificial Limbs; Comorbidity; Female; Humans; Iran; Iraq; Leg Injuries; Male; Phantom Limb; Stress Disorders, Traumatic; Treatment Outcome; Veterans; War; Young Adult

Medline is the source for the MeSH terms of this document.

ISSN: 0963-8288 **CODEN:** DREH **Source Type:** Journal **Original language:** English

DOI: 10.1080/09638280902810968 **PubMed ID:** 19479026 **Document Type:** Review