

#18 CURRENT STATUS OF MAJOR LOWER EXTREMITY AMPUTATION

Ahmed M. Abou-Zamzam, Jr, MD, Theodore H. Teruya, MD,
and Jeffrey L. Ballard, MD

Loma Linda University Medical Center, Loma Linda, CA

Objective: Major lower extremity amputations continue to be performed despite an aggressive policy of revascularization. Factors leading to amputation were analyzed to determine whether a reduction in amputation rate is possible.

Methods: A retrospective analysis of a prospective vascular registry was performed to identify patients undergoing above-knee amputation (AKA), below-knee amputation (BKA), and lower extremity revascularization (LER) for limb salvage between 1/1/99 and 1/1/02. Patient demographics, co-morbidities, insurance carrier and indication for operative intervention were analyzed.

Results: During the 3-year study period 131 major amputations were performed (79 AKA, 52 BKA) on 63 men and 55 women (mean age 66). Indications for amputation included critical limb ischemia with failed revascularization in 50 patients (38%), extensive pedal gangrene in 21 patients (16%), unreconstructable arterial anatomy in 17 patients (13%), overwhelming pedal sepsis in 12 patients (9%), non-viable, acutely ischemic foot in 12 patients (9%), excessive surgical risk in 10 patients (8%), and non-ambulatory status in 9 patients (7%). During the same period, 109 patients with limb threat (rest pain 51%, tissue loss 49%) underwent LER. Renal failure was significantly more common in the amputation group than the bypass group (34% vs. 17%, $p=0.005$). Twelve of 13 bilateral amputees (92%) had renal failure. The prevalence of managed care did not differ between groups (39% vs. 42%, amputation vs. LER, $p=0.7$).

Conclusions: Greater than one-half of all major lower extremity amputations are performed in patients who have failed attempts at revascularization or who are not candidates for LER due to anatomic factors. Additionally, 25% of eventual amputees present very late to the vascular surgeon with extensive gangrene or infection that precludes limb salvage. Prompt patient referral and treatment may improve outcome in this group of patients. Insurance issues did not appear to affect treatment. Renal failure continues to play a major role in limb loss.