

Clinical Evidence Regarding Outcome Measures in Traumatic Lower Limb Amputations

Background

- The height of the residual limb following amputation has a large impact on the amputee's functional capacity and quality of life.
- Physicians need accurate information as to the impact of the level of amputation on their patient's lives.
- It is understood that the more proximal the level of amputation the greater the physiological demand on the amputee.

Clinical Evidence

Quality of Life

- Perceived quality of life in unilateral amputee patients progressively and significantly lowers as the level of amputation becomes more proximal from BKA to TKA to AKA.
- Patients with bilateral amputation have a higher perceived quality of life than do unilateral TKA and AKA patients, but similar to unilateral BKA patients.

Mobility

- TKA patients are able to walk further than AKA or bilateral amputees.
- AKA and bilateral amputees show little to no difference in their mobility (assessed by ability to walk greater than 500ft.)

Employment

- Approximately 70% of lower-limb amputees were able to return to employment post-amputation regardless of the residual limb height.
- Lower proportions of active duty military were able to return to duty
 - 16% of BKA
 - 11% of AKA

Prosthesis Use

- Patients with BKA wore their prosthesis significantly more than those with an AKA.
- Patients with TKA wore their prosthesis less than BKA and AKA, but more than patients with bilateral amputations.

Pain Symptoms

- Pain experienced with the residual limb was found to be similar in BKA and AKA.

Penn-Barwell JG. Outcomes in lower limb amputation following trauma: a systematic review and meta-analysis. *Injury*. Dec 2011;42(12):1474-1479.

- Patients with TKA experience greater levels of perceived pain than do BKA or AKA patients.
- Bilateral amputees suffer from the least amount of pain of all lower-limb amputees.