C-Leg in limited community ambulators

Safety

**Major Findings**

With C-Leg compared to NMPKs:

- **Decreased risk of falling**
  
  Time required to complete timed up and go (TUG) test decreased by 38%

- **Improved safety**
  
  Number of uncontrolled falls decreased by 80%
  
  Self-reported falling decreased by 81%

- **Improved balance confidence**
  
  Activities-specific balance confidence scale (ABC) score increased by 26%

**Improved safety with C-Leg in K2 subjects**

K2 subjects self-assessed the number of falls and stumbles in the last 60 days (Kahle et al. 2008).

**Clinical Relevance**

Safety aspects of the prosthesis are highly relevant for the patients. Since the fear of falling can have a negative impact on activities of daily living as well as on participation, perceived safety is regarded as an important factor for quality of life of an amputee, prosthesis use and overall ambulation and activity. Information about safety is gathered through assessing the self-reported stumbles and falls over a certain period of time as well through test for balance confidence and the risk of falling.

**Summary**

Due to transition from NMPKs to C-Leg, self-reported falling decreased by 81% in K2 subjects (Kahle et al. 2008). Similar results were found by Hafner et al. (2009). The number of uncontrolled falls decreased by 80% in K2 subjects with C-Leg compared to NMPKs (Drerup et al. 2008).

The time required to complete the timed up and go (TUG) test decreased with the transition from NMPKs to C-Leg Compact by 38% from 17.7 to 24.5 seconds (Burnfield et al. 2012). The risk of falling in transtibial amputees is decreased when the required time to complete the TUG lies under 19s (Dite et al. 2007).

Balance was assessed by the activities-specific balance confidence (ABC) scale. With the transition from NMPKs to C-Leg Compact, the ABC score increased in K2 subjects by 26% (Burnfield et al. 2012).
### References of summarized studies


### Other references