

CAT → Low back pain is more prevalent in lower extremity amputees than in the general population.

Clinical Bottom Line(s): The prevalence of LBP in amputee is higher than in the general population with approximately 70-75% of amputees reporting moderate to severe LBP.

Citation(s):

1. Stam HJ et al. Prevalence of low back pain after transfemoral amputation related to physical activity and other prosthesis-related parameters. *Disability & Rehabilitation*. 2004;26(13);794-797.
2. Smith DG et al. Phantom Limb, Residual Limb, and Back Pain After Lower Extremity Amputations. *Clinical Orthopedics and Related Research*. 1999;362;29-38.

Three/four part clinical question: In a patient with a lower extremity amputation, what is the true prevalence of low back pain?

The studies: Stam et al – retrospective exploratory study; Smith et al – prospective exploratory study.

The study patients:

Stam et al, 2004

- ♦ 240 subjects, 161 M, 79 F, age not reported
- ♦ Approx 67% > 10 yrs since injury
- ♦ All AKA
- ♦ MOI: 61% trauma

Smith et al, 1999

- ♦ 92 subjects, 85% M, age 22-81
- ♦ Mean time since injury 18 yrs
- ♦ BKA 63%, AKA 25%
- ♦ MOI: 67% trauma

The evidence:

Stam et al, 2004

- ♦ 75% experience at least occasional LBP
- ♦ 75% consulted a specialist for LBP

Smith et al, 1999

- ♦ 71% experience moderate to severe LBP
- ♦ Time since amputation not related to LBP
- ♦ AKAs significantly more likely to have LBP

Comments:

1. Prevalence of LBP in general population has been reported as 12-45% experiencing LBP at any one time.
2. 19% of the general population will consult a specialist for their LBP
3. Both prevalence and consults with specialists are significantly higher in amputees than in the general population
4. More research is needed on the epidemiology and etiology of LBP in the amputee population. Is it related to altered biomechanics, leg length discrepancies, increased stress on spinal joints, etc?
5. Only preliminary evidence. Limitations include:
 - ♦ Homogeneity of subjects – are traumatic & vascular amputees really the same?
 - ♦ Does not address treatment strategies.
 - ♦ No standardized outcome measure used between the two studies.