

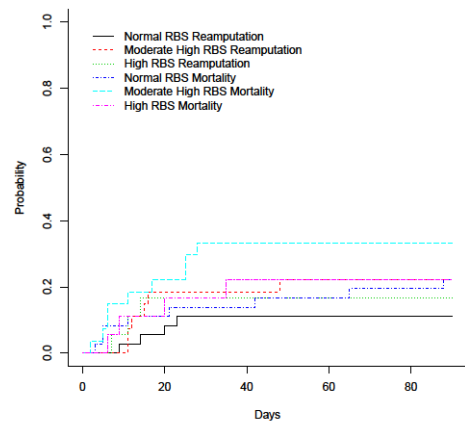
Does high RBS level preoperatively among diabetic patients with non-traumatic lower-limb amputation modify the risk of re-operation or mortality with in three months?

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Objective: The purpose of this study is to find out if high random blood sugar (RBS) level pre-operatively among diabetic patients with non-traumatic lower limb amputation is a decisive factor behind re-amputation or mortality within 3 months. **Method:** In this retrospective cohort study was included all diabetic patients who underwent a non-traumatic lower limb amputation and who had also registered RBS in a group of 270 cases from the orthopedic surgery department at Hvidovre Hospital, Copenhagen, Denmark from January 2010 to 31st December 2011. An independent sample t-test and Person's chi-squared test were conducted to compare postoperative outcomes (re-operation/mortality) with individual risk factors. Cox proportional hazards model was used to assess the relative contribution of different risk factors on postoperative outcomes within three months.

Results: Among the 270 cases 105 had diabetes. 24 were excluded due to missing values. 81 patients were included. Mean age 70.7 ± 11.8 years. Postoperative mortality 27.2 % and 16 % were re-amputated within three months. For high RBS level, the relative (RR) after adjusted with age for re-amputation was 1.50 (0.32-7.14), whereas moderate RBS level, RR for re-amputation 2.30 (0.64-8.23) with normal RBS as the reference group. Furthermore, for high RBS level, RR after adjusted with age for mortality was 1.37 (0.41-4.60), whereas with moderate RBS level, RR for mortality was 1.82 (0.72-4.60) with normal RBS as the reference group. All results were non-significant. **Conclusion:** This study showed that high RBS level pre-operatively among diabetic patients with non-traumatic lower limb amputation is not a decisive factor behind re-amputation or mortality within 3 months. Nevertheless, we see a trend towards high risk of re-amputation and mortality among high RBS level preoperatively.



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