Evaluation of blood glucose level variations in general and spinal anesthesia in diabetic patients undergoing orthopedic surgeries

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Introduction:

Diabetes increases the risk of preoperative morbidity and mortality that results from infection and cardio – vascular events. The aim of this study was to compare two methods of general anesthesia and spinal anesthesia on blood glucose changes in diabetic patients is undergoing orthopedic surgery.

Methods:

In this cross-sectional and analytical study, mean changes of blood sugar in both general anesthesia and spinal anesthesia in diabetic patients undergoing orthopedic surgery is investigated at before surgery, after surgical incision, one hour late and recovery.

Results:

25(31.75%) of patients was male and 55(68.75%) if them were female. Mean age of patients in spinal anesthesia patients was 64.90 + 10.73 year and patients in general anesthesia was 60.78 + 10.68 year. Mean BMI of patients in spinal anesthesia patients was 27.85 + 3.69 year and patients in general anesthesia was 29.43 + 3.57.

Conclusion:

Blood glucoe levels were significantly increased in each general and spinal group but was not significant between two groups . The blood glucose levels were significant in samples taken between incision and recovery period in both groups.

the study showed that the blood glucose level during surgery and anesthesia have been increased continuously and this increase in general group had a steeper slope but was acceptable .
Keywords : Diabetes , Blood glucose , General anesthesia , Spinal anesthesia