Incidence and risk factors for poor perioperative blood glucose management in patients with diabetic foot: a retrospective study, Chen et. al, Annals of Palliative Medicine, Volume 10, Issue 12, December 2021

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Level of Evidence: 2

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The objective of this retrospective study was to investigate the importance of glucose management preoperatively in diabetic patients. Assessing two hospital centers during January 2015 and June 2018, the diabetic patients that were included in the study included ones who received surgical treatment including amputation, debridement, or skin grafts. These patients were followed up with for 3 years to evaluate postoperative mortality, renal impairment, surgical infection, wound closure, and re-amputation.

Univariable and multivariable logistic regression analyses were conducted to assess poor blood glucose management in the midst of these risk factors. Among 268 diabetic patients, these individuals were placed into four groups classified as normal, hyperglycemia, hypoglycemia, and mixed. Researchers concluded that the patients in groups classified as hyperglycemia, hypoglycemia, and mixed revealed higher total mortalities than in the normal group. Additionally, risk factors such as old age, high levels of glycosylated hemoglobin, high levels of creatinine, and low levels of albumin were identified in the hyperglycemia, hypoglycemia, and mixed groups. In conclusion, this study amplifies the significance of managing diabetic patient’s blood glucose preoperatively and in the future to come.