Abstract P18

Correlation Between Thrombocyte Amount and Transient Blood Glucose to Diabetic Foot Ulcers

Purnamasari, R.[1,2], Safitri, A[1,2], Nurmadilla, N.[1]

Objectives: Diabetes Mellitus (DM) is a disease that is caused by an increase of blood sugar glucose, this condition have potential to increase the damage of macrovascular and microvascular. One of the main complications of Diabetes Mellitus Type II (DMT2) is diabetic foot ulcer. Hyperglycemia in T2DM is thought to trigger neuropathy which can cause diabetic foot ulcers and also associated with an increase of thromboxane A2 (vasoconstrictor and platelet aggregator agonist), thereby increasing the risk of plasma hypercoagulability.

Methods: The research design at this research is analytic descriptive with a cross-sectional study approach and involves 21 patient with T2DM with diabetic foot ulcers. The level of Transient Blood Glucose (TBG) and thrombocyte was examined from venous blood.

Results: This research showed that there were increased thrombocytes in 6 patients (28.57%); increased transient blood glucose in 17 patients (80.95%); and increased transient blood glucose and thrombocytes at the same time were seen in 5 patients (23.8%). Correlation between TBG to diabetic foot ulcer ($p=0.236 < 0.05$); the correlation between thrombocyte to diabetic foot ulcer ($p=0.112 <0.05$); the correlation between TBG and thrombocyte to diabetic foot ulcer ($r=-0.372$, $p=0.097$), the correlation between TBG to thrombocyte ($r=-0.309$, $p=0.228$).

Conclusion: From these results we might conclude that there is no relationship between TBG to diabetic foot ulcer, no relationship between thrombocyte to diabetic foot ulcer, weak relationship between TBG and thrombocyte, and there is no relationship between high TBG to thrombocyte. But we cannot exclude other factors that might have influenced the results and requires more research for a more conclusive outcome.

Keywords: diabetic mellitus type II, correlations, blood glucose, thrombocyte, ulcers

1. Medical Faculty of Universitas Muslim Indonesia, Makassar, Indonesia
2. Ibnu Sina Hospital, YW-UMI, Makassar, Indonesia

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Correspondence to:
Dr Reeny Purnamasari, Surgeon, Medical Faculty of Universitas Muslim Indonesia, Makassar, Indonesia. Email: renypurnamasari11@gmail.com