Study of Platelet Parameters in Dengue Severity Grading

Mr. Kalyan Raghunath Rathod and Mr. Vivek Keshav Gharat

L. T. M. G. Hospital, Sion, Mumbai, Maharashtra

kalyan.rathod203@gmail.com, vivekgharat7827@gmail.com

Abstract: *Dengue fever is one of the most common diseases spread by mosquitoes around the world. It can range from a mild illness with fever to serious conditions like dengue hemorrhagic fever and shock. Predicting how severe a case might become early on is important for better treatment. Certain blood markers, like platelet count, mean platelet volume (MPV), platelet distribution width (PDW), and plateletcrit (PCT), have been studied as possible signs of how the disease is progressing. But it's still unclear how well they can predict severity. This study looks at the relationship between these platelet markers and the severity of dengue, following the WHO 2009 classification. Patients with dengue were grouped into mild, moderate, and severe categories. Their platelet markers were checked when they first arrived and compared to their level of disease severity. The results showed that severe cases had lower platelet counts, higher MPV and PDW, and changes in PCT. MPV and PDW were found to be especially good at predicting severity. These findings suggest that platelet markers can be quick and affordable tools to help predict how severe a case might be and how risky it is, supporting doctors and lab tests in making better decisions..*

Keywords: Dengue, Platelet count, Mean platelet volume, Platelet distribution width, Dengue severity, Biomarkers