Platelet-to-lymphocyte ratio for mechanical thrombectomy outcome

The association with hemorrhagic change and the recovery parameters at the 24th hour may enable platelet-to-lymphocyte ratio (PLR) and Neutrophil to lymphocyte ratio to be used as significant prognostic factors in patients with acute ischemic stroke undergoing mechanical thrombectomy. Further studies are needed [1].

The platelet-to-lymphocyte ratio could represent pro-thrombotic inflammatory state in acute ischemic stroke patients because having a high-PLR values increased the poor prognosis, the rate of insufficient recanalization, and the size of infarcted area [2].

For Lee et al. Higher NLR and PLR were associated with unsuccessful reperfusion after EVT. The combined application of both biomarkers could be useful for predicting outcomes after EVT [3].

A study demonstrated that both NLR and PLR were independent predictors of 3-months functional outcomes of AIS. They may help to identify high-risk patients more forcefully when combined together [4].

In patients with mechanical thrombectomy (MT), platelet-to-lymphocyte ratio (PLR) and Neutrophil to lymphocyte ratio on admission could be predictive factors of prognosis and mortality at 3 months. Decreased PLR and increased Neutrophil to lymphocyte ratio were associated with favorable clinical outcome 3 months after MT [5].

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