ELEVATED PLATELET COUNT IS A RISK FACTOR FOR REFRACTORY TAKAYASU ARTERITIS

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Background: Takayasu arteritis (TAK) is a chronic systemic vasculitis that mainly affects the aorta and its major branches. This chronic relapsing disease is relevant to significant morbidity and treatment remains challenging [1]. Early identification of refractory TAK is helpful to improve the long-term prognosis of the disease. In recent years, platelets have been recognized as important markers for various types of diseases [2]. Platelet counts may indicate the activity of autoimmune disease as well as responsiveness to anti-inflammatory therapy and presence of various comorbidities [3]. Multiple studies have demonstrated that platelet count of TAK patients was significantly increased, especially in the active phase, which was significantly higher than that in the inactive phase [4-8].

Objectives: Platelets have been recognized as important markers for various types of diseases. The aim of our study was to investigate whether platelet count could be the risk factor of refractory Takayasu arteritis (TAK).

Methods: In this retrospective study, 57 patients were divided into groups with or without refractory TAK. We compared the clinical manifestations, laboratory parameters, and medication between the two groups. The logistic regression analysis was used to identify the risk factors of refractory TAK.

Results: Among the 57 patients, 18 cases (31.6%) were considered to have refractory TAK within 1 year of initiation of medication in our hospital. Refractory TAK patients had higher level of platelet (PLT) than non-refractory TAK patients (305.5 vs. 272.0, 109/L, P=0.043). PLT was positively correlated with ESR (r=0.502, p<0.001), IgA (r=0.322, p=0.016), IgG (r=0.419, p=0.010), C3 (r=0.554, p<0.001), and the best cut-off value was 296.5×10^9/L. The level of PLT greater than 296.5×10^9/L was found to be statistically related to refractory TAK (OR [95%CI] 4.000 [1.233-10.113], p=0.021).

Conclusion: Clinicians should pay close attention to platelet levels in patients with TAK. For TAK patients with elevated platelet levels, earlier and more aggressive treatment is needed, and antithrombotic therapy is recommended as appropriate.

REFERENCES:

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