CD4+CD25+High FoxP3+ Regulatory T Cells, B Lymphocytes, and T Lymphocytes in Patients With Acute ITP in Assiut Children Hospital.

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Abstract:

We aimed to examine the levels of lymphocyte subsets and regulatory T cells in patients with newly diagnosed immune thrombocytopenia (ITP) and their correlation with the course of ITP. The study included 40 pediatric patients with acute ITP and 30 controls. Lymphocytes and regulatory T cells were analyzed by flow cytometry. The percentages of CD19(+) and CD8(+) cells were significantly increased while that of CD4(+) cells and CD4(+)/CD8(+) ratio were significantly decreased. The percentages of CD4(+)CD25(+High) and CD4(+)CD25(+High) forkhead box protein 3 (Foxp3(+)) cells and the expression of Foxp3(+) in CD4(+)CD25(+High) cells were significantly decreased in patients. Age, platelet count, and mean platelet volume (MPV) in patients with brief duration of thrombocytopenia were significantly decreased than in those with prolonged duration. The percentages of CD8(+), CD4(+)CD25(+High), and CD4(+)CD25(+High) Foxp3(+) were significantly increased in patients with brief duration. Age, platelet count and MPV, and CD8+ cells had prognostic significance. CD4(+)CD25(+High) Foxp(+) T cells may be a helpful prognostic marker in children with acute ITP.

Published In:

Clin Appl Thromb Hemost.,,