OP 08

EVALUATION OF VITAMIN D STATUS IN ADULT PATIENTS WITH IMMUNE THROMBOCYTOPENIA

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Objective: 25-OH-vitamin D has been demonstrated to have immunomodulatory effects in addition to maintaining calcium and bone homeostasis. Numerous autoimmune diseases have been linked to a deficiency in this nutrient. Immune cells can metabolize vitamin D and express the vitamin D nuclear receptor. In this study, we aimed to examine the relationship between vitamin D levels and adult patients newly diagnosed with ITP. **Methodology:** The methodology used for this investigation was retrospective. Our primary outcomes were the relationships between 25(OH)D value and platelet count as well as the clinical manifestations of ITP at the time of diagnosis and 25(OH)D value. We also looked at how the various factors and 25(OH)D levels correlated. **Results:** When the vitamin D levels of the patients included in the study were evaluated at the time of diagnosis of ITP; 15 (25%) had vitamin D sufficiency, 15 (25%) had vitamin D insufficiency, 30 (50%) had vitamin D deficiency. There was no statistically significant difference between the median ages of the patients in all 3 groups. In the group with sufficient vitamin D level, male gender was observed more than female gender (p:0.001). **Conclusion:** When we compared the vitamin D levels of the patients according to their response to first-line treatment, no significant difference was found in terms of vitamin D levels in patients who did not respond to treatment, who responded partially, and who responded completely (p:0.32). Similarly, no significant difference was found between response to second-line treatment and vitamin D levels (p:0.16). There was no statistically significant difference in vitamin D between relapsed and non-relapsed

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OP 09

CHANGES IN MUCOSA-ASSOCIATED INVARIANT T CELLS (MAIT), ASSOCIATED CYTOKINES, AND MR-1+ CELL NUMBER AND PHENOTYPE IN THE PERIPHERAL BLOOD OF PEDIATRIC ITP PATIENTS WITH AND WITHOUT ELTROMBOPAG THERAPY

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Objective: Immune thrombocytopenia (ITP) is an autoimmune disease characterized by thrombocytopenia caused by the formation of antibodies against platelets. Mucosa-associated invariant T cells (MAIT), a subset of unconventional T cells present in the blood and mucosa, are activated in an MR-1-mediated manner, respond to certain infections and cytokines and produce various effector cytokines. **Case report:** In this study, changes in blood MAIT cells were investigated in pediatric ITP patients who received and did not receive Eltrombopag. Twenty healthy volunteers (n:20), 60 untreated, and 16 treated patients (with Eltrombopag) were included in the study. **Methodology:** PBMCs isolated using the Ficoll-Hypaque density gradient were stained with appropriate surface markers and subjected to flow cytometric analysis. In addition, intracellular cytokine staining was performed to measure the level of IFN-γ, IL17A, IL-22, TNF-α cytokines after PMA/Ionomycin stimulation, and all data were analyzed using FlowJo and GraphPad 8. **Results:** Independent of Eltrombopag treatment, MAIT cell absolute counts were decreased in ITP patients. CD45RO levels of the $CD8^{+}$MAIT subtype increased, $\alpha\beta^{+}$ T cells decreased, and $\gamma\delta^{+}$ T cell frequency increased in ITP patients. In patients, the frequency of MAIT cell-derived IFN-γ and TNF-α decreased, MR-1 expression, which is responsible for MAIT cell activation in the $CD3^{-}$fraction, increased, and this level decreased to the levels in healthy controls in individuals receiving Eltrombopag treatment. **Conclusion:** The low HLA-DR levels seen in CD3- cells in ITP patients reached the levels of healthy controls in the group receiving Eltrombopag. These results show that the number and activation status of MAIT cells in ITP patients change and Eltrombopag treatment modulates MAIT cell activity.

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