CONTRIBUTION OF THE INTESTINAL MICROBIOTA AND THE OXIDATION-REDUCTION SYSTEM IN STABILIZING PLATELET (PLT) COUNT IN IMMUNE THROMBOCYTOPENIC PURPURA (ITP)

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INTRODUCTION

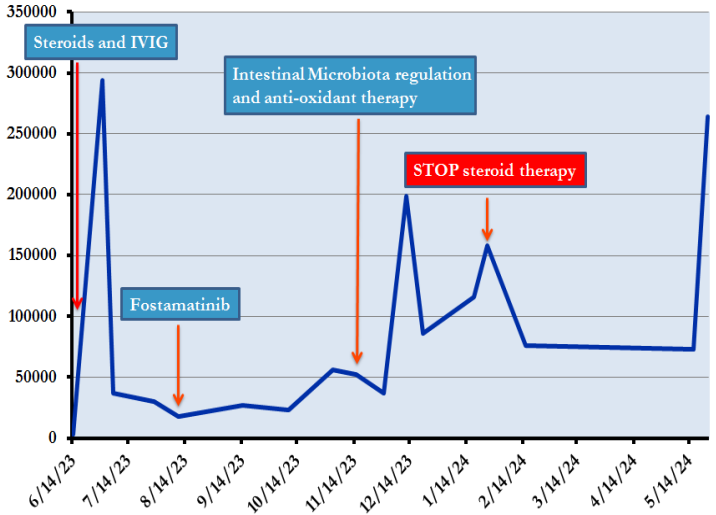
ITP is an autoimmune disorder characterized by a PLT count of <100x10^9/L, resulting from antibody-mediated PLT destruction. Treatment for ITP usually involves steroids, intravenous immunoglobulins (IVIG), rituximab, splenectomy, thrombopoietin receptor agonists and fostamatinib, a spleen tyrosine kinase (SYK) inhibitor. The well-balanced cross-talk between microbiota and the intestinal immune system is under study for its contribution in regulating immune response in many autoimmune diseases.

METHODS

The patient was instructed to regulate his lifestyle to reduce oxydative stress, starting daily physical activity and following a healthy diet, combined with prebiotics and probiotics, glutathione, N-acetylcysteine, vitamin C, vitamin D and essential aminoacids supplements; a high dosage of daily melatonin was supplied to regulate hormonal biorhytms and to help reduce reactive oxygen species, enhancing enzymes' antioxidant capabilities of the body.

AIM

to regulate the intestinal microbiota in order to taper and possibly stop steroid therapy



CLINICAL HISTORY

we present a case of a 30-years-old male with a relapse of ITP, firstly occurred in childhood when he was 3-years-old and treated at that time with steroids therapy stabilizing the count at 30-40x10^9/L; at relapse (PLT count 3x10^9/L), a **steroids+IVIG** treatment was restarted, with a short and unstable response. Then, it was continued **steroid** therapy with the addition of **fostamatinib**, resulting in a partial response (PLT count 30-50x10^9/L) after 4 months of combo treatment.

RESULTS & CONCLUSIONS

After two months the PLT count reached 150x10^9/L and he could stop steroid therapy. The next goal, will be to reduce fostamatinib dosage until a possible interruption, by working on maintaining a good intestinal homeostasis and a favorable redox state

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