

Letter to Editor

The Role of Photopheresis in the Treatment of Graft Versus Host Disease, A Single Centre Experience

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Photopheresis, also known as extra corporeal photopheresis (ECP), is a medical treatment that removes blood via a machine and isolates white blood cells. Then, these white cells are exposed to a medication called 8-methoxypsoralen followed by UVA irradiation before returning the blood to the patient. This procedure, which results in crosslinking of pyrimidine bases in DNA, produces massive apoptosis of the treated cells. ECP has been shown to have efficacy in the treatment of many disorders, including cutaneous T cell lymphoma, graft versus host disease (GVHD), solid organ transplant rejection, and some other kind of autoimmune disorders, like scleroderma, lupus erythematosus, crohn disease, and type 1 diabetes [1,2]. Extra corporeal photopheresis may also have some use in the treatment of psoriasis, rheumatoid arthritis, multiple sclerosis, nephrogenic systemic fibrosis/nephrogenic fibrosing dermopathy, and scleromyxedema [1,2].

Graft versus host disease is one of the major mortality reasons of the allogeneic stem cell transplantation. Treatment and prevention of GVHD is crucial for survival of the patient after stem cell transplantation.

Photopheresis treatment is now first line therapy for both acute and chronic graft versus host disease with steroids [3].

We aimed to show effect of photopheresis treatment on both acute and chronic graft versus host diseases.

In this report, totally 30 cases which have done allogeneic stem cell transplantation between years of 2014-2017 in Turgut Ozal Stem Cell Transplantation Unit and got photopheresis treatment after acute and chronic graft versus host disease are analyzed. 14 of the patients are female (46%) and 16 are male (54%). Mean age is 36.8 (min: 20 max: 60). Disease distribution is like; 17 AML (acute myeloid leukemia) 5 are ALL (acute lymphocytic leukemia), 3 are CML (chronic myeloid

leukemia), 2 are mycosis fungoides, 2 are myeloid plastic syndrome, 1 is nonhodgkin lymphoma. Mean photopheresis cycle is 13. (min 2, max 34). 5 of the cases are acute GVHD and 25 are chronic GVHD. Results of the treatment is promising. 24 of the GVHD cases under controlled with photopheresis, and 6 patients are exitus because of the progression of their hematological diseases. Beyond the photopheresis 7 patients got mycophenolate mofetil, 4 got imatinib, 2 got ibuprofen and 2 patients got ruxolitinib with steroids.

Photopheresis is very effective on treatment of both acute and chronic graft versus host diseases. It helps to get control on both acute and chronic graft versus host diseases. It improves survival via controlling the GVHD and makes better the quality of life of the patients. It has very few side effects like catheter associated situations and few contraindications like psoralen allergy [4] so, it is safe when it is made especially in experienced centers. Photopheresis treatment is now firstline therapy for both acute and chronic graft versus host disease with steroids.

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