

## Physician - Heart Failure, Transplantation and Mechanical Support Systems

[MEP-46]

### A Case of Cyclosporine-Associated Early Hyperpigmentation

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Cyclosporine is an immunosuppressive agent used to prevent rejection in organ transplants, as well as for the treatment of various immune diseases involving dermatological, hematological, renal, gastroenterological, neurological, and musculoskeletal systems. Cyclosporine has side effects such as blurred vision, fatigue, stomach discomfort, nephrotoxicity, hepatotoxicity, infections, lymphoma, hypertrichosis, gingivitis, and central nervous system toxicity. Herein, we presented a case of heart transplantation where a rare side effect of cyclosporine, hyperpigmentation, was observed. A 46-year-old female patient underwent heart transplantation surgery. Prednisone, mycophenolate mofetil, and tacrolimus were initiated as immunosuppressive therapy. Due to the involvement of tacrolimus in the etiology of posterior reversible encephalopathy syndrome, cyclosporine was chosen as the immunosuppressant. The patient was started on 300 mg of cyclosporine once daily (5 mg/kg/day), and the dosage was adjusted based on daily blood levels. Six days after starting cyclosporine therapy, widespread hyperpigmentation and hirsutism were noticed on the patient's body. Etiological factors such as adrenal insufficiency, drug therapy, and hemochromatosis, which could cause generalized hyperpigmentation, were ruled out. The existing hyperpigmentation was associated with cyclosporine therapy. Cyclosporine is a calcineurin inhibitor. According to the literature, cyclosporine-associated hyperpigmentation, hirsutism, hypertrichosis, and darkening of hair color are rare side effects. These have been observed with both oral and topical use. However, the literature shows that the onset of these side effects typically occurs between 45 days and four months after the initiation of the drug. In our experience, despite the patient not receiving a high dose of cyclosporine, the side effects emerged within six days, and no cases of such early occurrence have been reported in the literature.

**Keywords:** Cyclosporine, heart transplant, hyperpigmentation, immunosuppression, posterior reversible encephalopathy syndrome.



**Figure 1.** Hacettepe heart transplant hyperpigmentation case.

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