

## De-Pigmentary Effect of Ayurvedic Treatment on Hyper-Pigmentation of Skin Due to Chloroquine: A Case Report

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**Abstract :** Toxic epidermal necrolysis, pruritis, rashes, lichen planus like eruption, hyper pigmentation of skin are rare toxic effects of chloroquine used over a long time. Skin and mucus membrane hyper pigmentation is generally of a bluish black or grayish color and irreversible after discontinuation of the drug. According to Ayurveda, Dushivisha is the name given to any poisonous substance which is not fully endowed with the qualities of poison by nature (i.e. it acts as an impoverished or weak poison) and because of its mild potency, it remains in the body for many years causing various symptoms, one among them being discoloration of skin. The objective of this case report is to investigate the effect of Ayurvedic management of chloroquine induced hyper-pigmentation on the line of treatment of Dushivisha. Case Report: A 26-year-old female was suffering from hyper-pigmentation of the skin over the neck, forehead, temporo-mandibular joints, upper back and posterior aspect of both the arms since 8 years had history of taking Chloroquine came to Out Patient Department of National Institute of Ayurveda, Jaipur, India in Jan. 2015. The routine investigations (CBC, ESR, Eosinophil count) were within normal limits. Punch biopsy skin studied for histopathology under hematoxylin and eosin staining showed epidermis with hyper-pigmentation of the basal layer. In the papillary dermis as well as deep dermis there were scattered melanophages along with infiltration by mononuclear cells. There was no deposition of amyloid-like substances. These histopathological findings were suggestive of Chloroquine induced hyper-pigmentation. The case was treated on the line of treatment of Dushivisha and was given Vamana and Virechana (therapeutic emesis and purgation) every six months followed by Snehana karma (oleation therapy) with Panchatikta Ghrit and Swedana (sudation). Arogyavardhini Vati -1 g, Dushivishari Vati 500 mg, Mahamanjisthadi Quath 20 ml were given twelve hourly and Aragwadhadhi Quath 25 ml at bed time orally. The patient started showing lightening of the pigments after six months and almost complete remission after 12 months of the treatment. Conclusion: This patient presented with the Dushivisha effect of Chloroquine and was administered two relevant procedures from Panchakarma viz. Vamana and Virechana. Both Vamana and Virechanakarma here referred to Shodhana karma (purification procedures) eliminates accumulated toxins from the body. In this process, oleation dislodge the toxins from the tissues and sudation helps to bring them to the alimentary tract. The line of treatment did not target direct hypo pigmentary effects; rather aimed to eliminate the Dushivisha. This gave promising results in this condition.

**Keywords :** Ayurveda, chloroquine, Dushivisha, hyper-pigmentation

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