

Hyperpigmentation induced by prolonged use of chloroquine: a case report

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Objective

Hyperpigmentation is a potential side effect of antimalarial drugs, such as the Chloroquine. It has generally been explained that the hyperpigmentation associated with Chloroquine is due to the affinity for melanin and it gets concentrated in pigmented structures.

The objective is To describe a case of a middle-aged woman, who developed a skin hyperpigmentation associated with Chloroquine after 6 years of treatment.

Case report

A 36-year-old woman was referred to service of dermatology for evaluation of a pigmentation on the both upper limbs that had appeared around 6 years after starting treatment, without any painful symptoms. Her medical history revealed that she had been undergoing treatment with Chloroquine (100 mg/day), acetylsalicylic acid (100mg/day), enalapril (20 mg/day) and *mycophenolate mofetil* (2 g/day) for lupus nephritis and arterial hypertension since 2006. Clinical examination showed a Black-gray pigmented diffuse lesion with irregular borders on the back and both lower limbs (Fig. 1 and 2). The pigmented area did not blanch with pressure.

The history of long-term chloroquine use, led to the clinical working diagnosis of drug-induced pigmentation caused by chloroquine diphosphate.

Discussion and Conclusion

- ✓ On the basis of the causality assessment according to the French method: a score of **I6B4** was attributed to **Chloroquine, I1B1** to **acetylsalicylic acid, enalapril** and **mycophenolate mofetil**.
- ✓ A score of I6B4 was the high score observed which means that the delay on onset was compatible, the adverse effect persisted after the reintroduction of Chloroquine and the drug effect mechanism is evocative of the drug's role in the occurrence of this adverse effect and the drug reaction was reported in the literature.
- ✓ The chronologic, semiotic criteria and bibliographic data are more in favor of a relationship with the Chloroquine and the skin hyperpigmentation, especially as this adverse effect is not described with the other associated drugs.
- ✓ However, an eye examination is necessary to detect any infringement of the retina that can lead to blindness.

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Figure 1: Clinical aspect of hyperpigmentation induced by chloroquine therapy

