

## CASE REPORTS

### CHLOROQUINE-INDUCED PHOTOSENSITIVE DERMATOSES

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Two female patients suffering from rheumatoid arthritis were put on chloroquine 250 mg bid. After a period of 4 weeks, both of them developed photosensitive dermatitis. Following withdrawal of chloroquine, both of them showed improvement in dermatitis gradually over a period of 3-4 months.

**Key Words :** Photosensitivity, Lichenoid dermatitis, Cheilitis, Chloroquine

#### Introduction

Chloroquine is used in the treatment of malaria and various photosensitive dermatoses. It is well absorbed from the gut and gets selectively concentrated in the liver, spleen, lung, adrenals, spinal cord and the skin. The actual peak UV absorption spectrum of chloroquine is between 320-340 nm which is clinically not significant.<sup>1</sup> However, when chloroquine is irradiated there is a spectral shift resulting in markedly increased absorption in the UVB range, which is clinically highly significant.<sup>1</sup> It is interesting to note that chloroquine itself can cause photosensitive dermatitis.<sup>2</sup> Chloroquine induced lichenoid dermatitis has also been reported.<sup>1</sup> We report two cases of chloroquine-induced photosensitivity.

#### Case Reports

**Case 1 :** A 40-year-old female, known patient of rheumatoid arthritis for past 8 years was referred to our Department for the complaint of skin lesions over the face and the arms of 10 days duration. She was on Tab Brufen 400 mg tds and Tab methotrexate 2.5 mg, in pulses of 3 tablets

each per week. 1½ months back Tab chloroquine 250 mg bd had been introduced, following which she had developed pigmented skin lesions over the face and arms. History of burning sensation on exposure to sunlight was present.

There were multiple, irregular, well-defined, pigmented, scaly plaques over the sun-exposed areas of the face, upper arms and the forearms. A diagnosis of probable chloroquine-induced photosensitive dermatitis was made. Chloroquine was withdrawn and she was advised to continue Tab Brufen and Tab methotrexate.

Topical zinc cream was given for sunscreensing. Skin biopsy was done which showed the features of lichenoid dermatitis. The lesions gradually improved over a period of 3 months.

**Case 2 :** A 38-year-old female, who was suffering from rheumatoid arthritis for the previous 6 years presented with skin lesions over the lip of 2 weeks duration. She was receiving Tab Brufen 400 mg tds, in intermittent courses as she had mild form of the disease. One month back, Tab chloroquine 250 mg bd was added. One month later she developed lesions over the lower lip. On examination there was an ulcer covered with an adherent crust, about 3x1cm in size, mobile and tender over the sun-

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exposed part of the lower lip. A diagnosis of chloroquine-induced actinic cheilitis was made. Tab Chloroquine was withdrawn and topical zinc cream was advised. She continued to take Tab Brufen. Biopsy from the lip lesion showed features of chronic non-specific dermatitis. The lesion gradually improved in a period of 4 months.

### Discussion

Our patient 1 had chloroquine-induced photosensitive lichenoid dermatitis and patient 2 had chloroquine-induced actinic

cheilitis. We are not able to explain why one patient developed lichenoid dermatitis while the other developed actinic cheilitis. The type of skin lesion developed may be related to genetic factors and/or metabolites of chloroquine.

### References

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