

# Antimalarial in dermatology: 62 cases

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## Abstract

Although chloroquine, hydroxychloroquine and quinacrine were originally developed for the treatment of malaria, these medications have been used to treat skin disease for over 50 years. Recent clinical data have confirmed the usefulness of these medications for the treatment of lupus erythematosus. through the study of 62 patients under antimalarial followed in dermatology, we try to clarify the different antimalarial used within dermatology through their mechanism of action and mechanism of action, as well as indicating their clinical uses. In addition, contraindications, adverse effects, of antimalarial are reviewed.

## Introduction

The antimalarial, derive from the quinolizine core of quinine. Their initial therapeutic indication was the treatment of malaria attacks but, because of anti-inflammatory and immuno-modulatory activities, they have been since used to treat many other pathologies, in particularly dermatological ones. We provide a series of 62 cases to discuss their use in dermatology, indications, side effects and Evolution under treatment.

## Material and methods

We retrospectively reviewed the clinical records of all patients who are under antimalarial in dermatology department at University Hospital HASSAN II Fez during the period from 2011 to 2016, to identify indications and therapeutic modalities.

## Results

62 patients were collected, the mean age was 41 years old, sex ratio F/H = 3 ; although 13, 4% of patients had a history of autoimmune disease, The antimalarial were administered to 25% of lupus that was chronic in 30% of cases, amigo in 16% of cases, in to 40% of dermatomyositis, and 12% of sarcoidosis , 43% of patients had systemic signs, 33% of photosensitivity, 25% arthralgia, 11%, dry syndrome, 95% had a skin disease which had improved under antimalarial, a pretherapeutic was practiced among all the patients who came back normal in 90% of cases, in addition 41% , 41% of patients were put under hydroxychloroquine despite its non-availability in Morocco, 59% under chloroquine for a mean period of 27 months and a mean dose of 263 mg/day. 22% of patients had side effects, 30% of pigmentary disorders, 2 cases of rash, 6 cases had presented a visual field, and 3 cases of retinopathy, 62% of patients were on combination treatment with a favorable evolution de 69% of cases.

## Discussion

Antimalarial drugs have been in common use in dermatology [1]. Their mechanism of action is complex, and it is now known that they act through various pathways, and have immunomodulatory action, anti-inflammatory, antiproliferative, and photoprotective effects [2]. Antimalarial are effective for the treatment of the specific skin lesions of cutaneous Lupus erythematosus, whether acute, subacute,

or chronic, the beneficial effects of quinine in patients with lupus erythematosus (LE) were published in 1894 by Payne, who reported the successful treatment of discoid LE with this drug [3]. First synthetic antimalarial, quinacrine (QC), was made in 1930. Chloroquine (CQ) and hydroxychloroquine (HCQ) followed (CQ was first synthesized in 1934 and HCQ in 1955) [4]. The use of antimalarial as a treatment for Lupus erythematosus became widespread in 1951, with the publication of an article by which described good response to QC treatment in 18 patients with LE [5]. They are also used for treatment of dermatomyositis, Sarcoidosis [6,7] and others such as Late cutaneous porphyria and chronic ulcerative stomatitis, or lichen planus [8] in our context they are used mainly for lupus, dermatomyositis and sarcoidosis.

They have many side effects dominated by the irreversible ocular involvement [9] imposing an ophthalmologic examination, color and visual field test, prior to treatment initiation and an annual monitoring.

## Conclusion

Antimalarial drugs had an effective treatment that can be safe for the patient and can cause secondary effects of the interest or irreversible a pretreatment investigations with Clinical and biological monitoring of patients under treatment

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