**An update on the use of hydroxychloroquine in cutaneous lupus erythematosus: A systematic review**

[Shipman WD](https://www.ncbi.nlm.nih.gov/pubmed/?term=Shipman%20WD%5BAuthor%5D&cauthor=true&cauthor_uid=31306730)1, [Vernice NA](https://www.ncbi.nlm.nih.gov/pubmed/?term=Vernice%20NA%5BAuthor%5D&cauthor=true&cauthor_uid=31306730)2, [Demetres M](https://www.ncbi.nlm.nih.gov/pubmed/?term=Demetres%20M%5BAuthor%5D&cauthor=true&cauthor_uid=31306730)3, [Jorizzo JL](https://www.ncbi.nlm.nih.gov/pubmed/?term=Jorizzo%20JL%5BAuthor%5D&cauthor=true&cauthor_uid=31306730)4.

[Author informationJ Am Acad Dermatol.](https://www.ncbi.nlm.nih.gov/pubmed/31306730) 2019 Jul 12. pii: S0190-9622(19)32387-4. doi: 10.1016/j.jaad.2019.07.027. [Epub ahead of print]

1

Weill Cornell/Rockefeller/Sloan-Kettering Tri-Institutional M.D.-Ph.D. Program, New York, NY 10065; Department of Dermatology, Weill Cornell Medicine, New York, NY 10065. Electronic address: wds2001@med.cornell.edu.

2

Department of Dermatology, Weill Cornell Medicine, New York, NY 10065.

3

Samuel J. Wood Library & C.V. Starr Biomedical Information Center, Weill Cornell Medicine, New York, NY 10065.

4

Department of Dermatology, Weill Cornell Medicine, New York, NY 10065; Department of Dermatology, Wake Forest University School of Medicine, Winston-Salem, NC 27109.

Abstract

BACKGROUND:

Hydroxychloroquine is widely used for the treatment of cutaneous lupus erythematosus (CLE). Although new recommendations exist for hydroxychloroquine dosing, there is still uncertainty about the dosage that will elicit a satisfactory response in CLE while limiting adverse effects, specifically retinopathy.

OBJECTIVE:

To summarize hydroxychloroquine dosages, outcomes, and adverse effects in the treatment of CLE, focusing on retinopathy.

METHODS:

A comprehensive literature search from inception - December 2018 was performed in Ovid MEDLINE, Ovid EMBASE, and The Cochrane Library (Wiley). Studies were then screened against predefined inclusion/exclusion criteria.

RESULTS:

Twelve studies were selected and included 5 retrospective studies, 3 prospective studies, 2 case series, and 2 randomized controlled trials. These studies show that a hydroxychloroquine dosage up to 400 mg/day is effective for most CLE patients (range of effectiveness: 50-97%), with few adverse effects. One incidence of retinopathy, after a very high cumulative dose, was reported across all 12 studies (852 total patients).

LIMITATIONS:

Since retinopathy and other serious adverse effects may not appear until much later, many of these studies are limited by short follow-up time.

CONCLUSIONS:

This evidence suggests that hydroxychloroquine for CLE is effective at 400 mg/day with an exceedingly low incidence of retinopathy and other adverse effects.