AMERICAN ACADEMY OF OPHTHALMOLOGY®

Commentary

Collaboration for the Management of Hydroxychloroquine

James T. Rosenbaum, MD - *Portland, Oregon*
Karen H. Costenbader, MD, MPH - *Boston, Massachusetts*
Julianna Desmarais, MD - *Portland, Oregon*
Ellen M. Ginzler, MD, MPH - *Brooklyn, New York*
Nicole Fett, MD, MSCE - *Portland, Oregon*
Susan M. Goodman, MD - *New York, New York*
James R. O'Dell, MD - *Omaha, Nebraska*
Gabriela Schmajuk, MD, MSc - *San Francisco, California*
Victoria P. Werth, MS, MD - *Philadelphia, Pennsylvania*
Ronald B. Melles, MD - *Redwood City, California*
Michael F. Marmor, MD - *Stanford, California*

The American Academy of Ophthalmology has just formalized a statement of cooperation with 3 equivalent societies in rheumatology and dermatology to recognize common principles of management for users of hydroxychloroquine.[1] These principles are derived from the established recommendations of the American Academy of Ophthalmology[2] and the American College of Rheumatology,[3] but emphasize the importance of interspecialty cooperation to achieve optimal care with minimal medical or visual complications.

The implications for ophthalmology are clear. Ophthalmologists are responsible primarily for screening and advising about the visual complications of hydroxychloroquine, but the drug is prescribed by internists or dermatologists for immune, infectious, or dermatologic disease. The management must be collaborative to be effective both in treating those diseases and in preventing visual loss.

Ophthalmologists sometimes complain that their medical colleagues do not like it when they tell patients to stop hydroxychloroquine—but this is the point. These colleagues need to respect our judgment on the severity of retinopathy and its implications for visual loss, but equally, we need to respect their concern for the patient's overall welfare. We should not "stop" hydroxychloroquine unilaterally, but rather discuss the nature of findings that concern us to reach a collaborative decision. Early and questionable signs may merit concern, retesting, closer observation, dose reduction, and so forth, but the decision to alter use of a vital medication should involve the patient and the entire management team so that all understand the risks and the options. Hydroxychloroquine toxicity takes time to develop, so there is time to take these steps—as long as we avoid progression to a severe enough stage (e.g., any ophthalmoscopically visible damage) when progression to visual loss becomes likely.

A missing piece in our understanding of hydroxychloroquine toxicity is the relationship of dose to clinical effectiveness in diseases for which it is used. We should know whether lower doses could be effective or if a minimally effective dose exists. We hope that more active collaboration will induce our rheumatologic and dermatologic colleagues to seek these answers.

This new statement does not change advice about dosing ($\leq$ 5 mg/kg actual weight) or about imaging and field testing.[2] However, the focus does change. Ophthalmology is critical for managing the risk of hydroxychloroquine toxicity, but we are not alone. Prescribers need to improve communication with ophthalmologists about the need for hydroxychloroquine; ophthalmologists need to improve communication with prescribers about any retinal safety concerns. We urge you to read this brief document either in print[1] or on the American Academy of Ophthalmology website (https://www.aao.org/guidelines-browse?filter=Clinical%20Statements&sub=ONE.ContentTypes.ClinicalStatement).

Footnotes and Disclosures

Disclosure(s):
All authors have completed and submitted the ICMJE disclosures form.
The author(s) have made the following disclosure(s): J.T.R.: Consultant — AbbVie, UCB, Gilead, Novartis, Horizon, Roche, Eyevensys, Santen, Corvus, Affibody, Kyverna; Financial support — Pfizer, Horizon; Royalties — UpToDate
K.H.C.: Consultant — Neutrolis, Merck; Financial support — Merck, Janssen, Astra Zeneca, GSK; Equity owner — Alkermes, Generex; Royalties — UpToDate
E.M.G.: Consultant — AbbVie; Financial support — Aurina, Lilly, GSK
N.F.: Financial support — Lilly and Pfizer; Royalties — UpToDate
S.M.G.: Consultant — UCB, Pfizer; Financial support — Horizon Pharma, Novartis, Pfizer
V.P.W.: Consultant — Celgene, Medimmune, Resolve, Genentech, Idera, Janssen, Lilly, Pfizer, Biogen, BMS, Gilead, Amgen, Medscape, Nektar, Incyte, EMD Serona, CSL Behring, Principia, Crisalis, Viela Bio, Argenx, Kirin, Regeneron, Principia, AstraZeneca, Abbvie, Octapharma, GSK, Astra-Zeneca; Financial support — Celgene,

Janssen, Pfizer, Biogen, Gilead, Corvus Pharmaceuticals, Genentech, AstraZeneca, Viela, Syntimmune; University of Pennsylvania owns the copyright for the CLASI and CDASI

Correspondence:
James T. Rosenbaum, MD, Oregon Health & Science University Casey Eye Institute, 515 SW Campus Drive, Portland, OR 97239. E-mail: rosenbaj@ohsu.edu.

References

1. Rosenbaum JT, Costenbader K, Desmarais J, et al. ACR, AAD, RDS, and AAO 2020 joint statement on hydroxychloroquine use with respect to retinal toxicity. *Arthritis Rheum*. 2021 Feb 9. https://doi.org/10.1002/art.41683. Online ahead of print.
2. Marmor MF, Kellner U, Lai TY, et al. American Academy of Ophthalmology recommendations on screening for chloroquine and hydroxychloroquine retinopathy (2016 revision). *Ophthalmology*. 2016;123:1386−1394.
3. American College of Rheumatology. American College of Rheumatology position statement: screening for hydroxychloroquine retinopathy. https://www.rheumatology.org/Portals/0/Files/Screening-for-Hydroxychloroquine-Retinopathy-Position-Statement.pdf?ver=2016-10-04-170000–000. 2016. Accessed 04.02.21.