

The Medical Letter[®]

on Drugs and Therapeutics

Volume 58

June 20, 2016

ISSUE No.

1497

IN THIS ISSUE

Addendum: Doxycycline for Young Children? p 82

Important Copyright Message

FORWARDING OR COPYING IS A VIOLATION OF U.S. AND INTERNATIONAL COPYRIGHT LAWS

The Medical Letter, Inc. publications are protected by U.S. and international copyright laws. Forwarding, copying or any distribution of this material is prohibited.

Sharing a password with a non-subscriber or otherwise making the contents of this site available to third parties is strictly prohibited.

By accessing and reading the attached content I agree to comply with U.S. and international copyright laws and these terms and conditions of The Medical Letter, Inc.

For further information click: [Subscriptions](#), [Site Licenses](#), [Reprints](#)
or call customer service at: 800-211-2769

The Medical Letter[®]

on Drugs and Therapeutics

Volume 58 (Issue 1497)

June 20, 2016

Take CME Exams

Addendum: Doxycycline for Young Children?

A reader commenting on our Treatment of Lyme Disease article (Med Lett Drugs Ther 2016; 58:57) objected to a footnote in the table advising against use of doxycycline in children <8 years old. This warning has been included in the labeling of all tetracyclines since 1970 when it was recognized, after decades of use, that these drugs caused permanent staining and enamel hypoplasia of developing teeth. The CDC recently stated that short courses of doxycycline, which was first marketed in the US in 1967 and has less affinity for calcium than other tetracyclines, have not been shown to cause tooth staining.¹ That statement was prompted by the discovery that children <10 years old have a disproportionately high fatality rate from rickettsial diseases, particularly Rocky Mountain spotted fever, for which doxycycline is the drug of choice and chloramphenicol is the only proven alternative.

The main evidence supporting the CDC's statement was a retrospective cohort study consisting of a record review and dental examination of 271 children living on a Native American reservation. No staining was detected in any of the 58 children who had been treated with doxycycline before the age of 8 years or in any of the 213 children who had not been exposed to the drug. Enamel hypoplasia was present in 4% of children in both cohorts.²

Lyme disease, unlike Rocky Mountain spotted fever, is seldom fatal and can be treated with antibiotics other than doxycycline. A single dose of doxycycline is recommended for prophylaxis after a tick bite. Given the CDC's statement about its safety, it would seem reasonable to use doxycycline for prophylaxis in all age groups. When longer treatment courses (10, 14, or 28 days) are recommended for the various clinical manifestations of Lyme disease in children <8 years old, alternative antibiotics generally could be used instead. ■

1. HM Biggs et al. Diagnosis and management of tickborne rickettsial diseases: Rocky Mountain spotted fever and other spotted fever group Rickettsioses, Ehrlichioses, and Anaplasmosis – United States. MMWR Recomm Rep 2016; 65:1.
2. SR Todd et al. No visible dental staining in children treated with doxycycline for suspected Rocky Mountain spotted fever. J Pediatr 2015; 166:1246.

Follow us on Twitter  Like us on Facebook 

PRESIDENT: Mark Abramowicz, M.D.; **VICE PRESIDENT AND EXECUTIVE EDITOR:** Gianna Zuccotti, M.D., M.P.H., F.A.C.P., Harvard Medical School; **EDITOR IN CHIEF:** Jean-Marie Pflomm, Pharm.D.; **ASSOCIATE EDITORS:** Susan M. Daron, Pharm.D., Amy Faucard, MLS, Corinne Z. Morrison, Pharm.D., Michael P. Viscusi, Pharm.D.; **CONSULTING EDITORS:** Brinda M. Shah, Pharm.D., F. Peter Swanson, M.D.

CONTRIBUTING EDITORS: Carl W. Bazil, M.D., Ph.D., Columbia University College of Physicians and Surgeons; Vanessa K. Dalton, M.D., M.P.H., University of Michigan Medical School; Eric J. Epstein, M.D., Albert Einstein College of Medicine; Jane P. Gagliardi, M.D., M.H.S., F.A.C.P., Duke University School of Medicine; David N. Juurlink, BPhm, M.D., Ph.D., Sunnybrook Health Sciences Centre; Richard B. Kim, M.D., University of Western Ontario; Franco M. Muggia, M.D., New York University Medical Center; Sandip K. Mukherjee, M.D., F.A.C.C., Yale School of Medicine; Dan M. Roden, M.D., Vanderbilt University School of Medicine; Esperance A.K. Schaefer, M.D., M.P.H., Harvard Medical School; F. Estelle R. Simons, M.D., University of Manitoba; Neal H. Steigbigel, M.D., New York University School of Medicine; Arthur M. F. Yee, M.D., Ph.D., F.A.C.R., Weill Medical College of Cornell University

MANAGING EDITOR: Susie Wong; **ASSISTANT MANAGING EDITOR:** Liz Donohue; **EDITORIAL ASSISTANT:** Cheryl Brown

EXECUTIVE DIRECTOR OF SALES: Gene Carbona; **FULFILLMENT AND SYSTEMS MANAGER:** Cristine Romatowski; **EXECUTIVE DIRECTOR OF MARKETING AND COMMUNICATIONS:** Joanne F. Valentino; **VICE PRESIDENT AND PUBLISHER:** Yosef Wissner-Levy

Founded in 1959 by
Arthur Kallet and Harold Aaron, M.D.

Copyright and Disclaimer: The Medical Letter, Inc. is an independent nonprofit organization that provides healthcare professionals with unbiased drug prescribing recommendations. The editorial process used for its publications relies on a review of published and unpublished literature, with an emphasis on controlled clinical trials, and on the opinions of its consultants. The Medical Letter, Inc. is supported solely by subscription fees and accepts no advertising, grants, or donations. No part of the material may be reproduced or transmitted by any process in whole or in part without prior permission in writing. The editors do not warrant that all the material in this publication is accurate and complete in every respect. The editors shall not be held responsible for any damage resulting from any error, inaccuracy, or omission.

Subscription Services

Address:
The Medical Letter, Inc.
145 Huguenot St. Ste. 312
New Rochelle, NY 10801-7537
www.medicalletter.org

Customer Service:
Call: 800-211-2769 or 914-235-0500
Fax: 914-632-1733
E-mail: custserv@medicalletter.org

Permissions:
To reproduce any portion of this issue,
please e-mail your request to:
permissions@medicalletter.org

Subscriptions (US):
1 year - \$129; 2 years - \$232;
3 years - \$345. \$65 per year
for students, interns, residents, and
fellows in the US and Canada.
Reprints - \$12 each.

Site License Inquiries:
E-mail: info@medicalletter.org
Call: 800-211-2769 ext. 315
Special rates available for bulk
subscriptions.

Get Connected:  

Copyright 2016. ISSN 1523-2859

The
Medical
Letter