The Medical Letter®
On Drugs and Therapeutics

Published by The Medical Letter, Inc. • 1000 Main Street, New Rochelle, NY 10801 • A Nonprofit Publication

IN THIS ISSUE (starts on next page)

In Brief: Poor Metabolizers of Clopidogrel (Plavix) .................................................... p 33

Important Copyright Message

The Medical Letter® publications are protected by US 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 US 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

FORWARDING OR COPYING IS A VIOLATION OF US AND INTERNATIONAL COPYRIGHT LAWS
IN BRIEF

Poor Metabolizers of Clopidogrel (Plavix)
The FDA has required the manufacturer of Plavix, an antplatelet drug used in addition to aspirin to prevent cardiovascular events in high-risk patients,1 to add a boxed warning to the package insert about the risk of a poor response to the drug in patients with genetic polymorphisms of the cytochrome P450 enzyme CYP2C19. Clopidogrel is a prodrug and CYP2C19 is mainly responsible for its bioactivation. The Medical Letter reported last year that several studies have found higher rates of cardiovascular events, including stent thrombosis, in patients with these polymorphisms taking clopidogrel.2

At least one genetic polymorphism leading to poor metabolism of clopidogrel has been reported to occur in 15% of Caucasians, 17% of African Americans and 30% of Asians.3 Since many patients take clopidogrel to protect against life-threatening events, and some continue to do so for extended periods of time, it might be worthwhile to test for these polymorphisms. Such tests, requiring small amounts of blood or saliva, are commercially available from clinical laboratories. More directly, patients who are taking clopidogrel could have platelet aggregation assays to determine whether the drug is being activated.

However, the best course of action for patients who prove to be poor metabolizers of clopidogrel is not clear. They could be treated with higher doses of clopidogrel, but the doses that would be safe and effective in such patients have not been established. Alternatively, they could be treated with prasugrel (Effient), a similar antplatelet drug that does not require CYP2C19 for activation, instead of clopidogrel, but prasugrel has a greater effect on platelets and may cause more bleeding.4

References: