Information on clopidogrel (Plavix®) therapy

The New England Journal of Medicine posted an early release article on April 20, 2000. The contents of the article involve a report on eleven cases of Thrombotic Thrombocytopenic Purpura (TTP) associated with clopidogrel therapy. Highlights of the article will follow.

- TTP associated with ticlopidine therapy was found after 7 years of post marketing surveillance. Only two years of post-marketing surveillance exist with clopidogrel.
- The reported cases of TTP occurred from March 1998- March 2000.
- Three million patients have been treated with clopidogrel since its approval in 1998.
- Treatment for clopidogrel associated TTP involved plasma exchange. Ten of 11 patients treated had responses, with 2 requiring 20 or more exchanges.
- One patient died despite undergoing plasma exchange.
- Concomitant medications in the patient group included atorvastatin, cyclosporine, atenolol, and simvastatin.
- Length of clopidogrel therapy was 3-14 days in 10 of 11 patients. This is in contrast to TTP associated with ticlopidine use, which manifests in 2-12 weeks after therapy.
- One patient had received ticlopidine two years earlier with no adverse effects.

This report brings attention to a significant adverse event associated with clopidogrel therapy. **Although the incidence of TTP in clopidogrel treated patients may be rare, clinicians need to be aware of its possibility.** The manufacturer of clopidogrel reports the occurrence of TTP to be 11 cases per million patient years. A background comparison for TTP is reported to be four cases per million patient years. Patients receiving therapy with this agent should be carefully screened for predisposing factors to TTP development. The association with concurrent use of atorvastatin and simvistatin requires further investigation. Additionally, clinical symptoms of TTP; confusion, slurred speech, and aphasia, should be fully investigated and not attributed to a secondary neurologic event.

Any cases of TTP associated with clopidogrel therapy should be reported to the FDA using the MedWatch program.

Bennett CL, Connors JM, Carwile JM, et al. Thrombotic Thrombocytopenic Purpura associated with clopidogrel. N Engl J Med 2000; June 15 issue.

Please contact PBM Webmaster.

Updated 6/01