The Institute for Safe Medication Practices Canada (ISMP Canada) is an independent national not-for-profit agency established for the collection and analysis of medication error reports and the development of recommendations for the enhancement of patient safety.





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Drug Name Alert: Potential for Confusion between Pradax and Plavix

ISMP Canada has received 3 incident reports from healthcare practitioners related to the brand names Plavix (clopidogrel) and Pradax (dabigatran etexilate). Two of these reports identified concerns about the potential for confusion between the brand names. The third report, received just recently, described a mix-up that reached a patient:

An otherwise healthy patient was scheduled for an endovascular coiling procedure to treat a brain aneurysm. Several days before the procedure, the neurosurgeon wrote a prescription for Plavix 150 mg po daily with acetylsalicylic acid (ASA) 325 mg po daily. The patient was to take these medications to prevent platelet aggregation and clot formation during, and as a result of, insertion of a foreign substance (the coils) into the vascular system.

The day before the scheduled procedure, the patient was admitted to the hospital as planned. Fortunately, the patient had remembered to bring all current medications to the hospital. During medication reconciliation, the pharmacist noticed that the patient was taking Pradax 150 mg daily instead of the intended Plavix 150 mg daily. The hospital pharmacist called the community pharmacy to discuss the situation. It was determined that the order for Plavix had been misinterpreted and that Pradax had been dispensed in error. The neurosurgeon was notified of the error, and the procedure was postponed.

Plavix (clopidogrel) is a platelet aggregation inhibitor that was initially approved in Canada in 1998 for the secondary prevention of vascular ischemic events (myocardial infarction, stroke, vascular death) in patients with a history of symptomatic atherosclerotic disease. The indications for Plavix were expanded to include acute coronary syndrome (ACS) unstable angina or non-Q-wave myocardial infarction (2002), and ST-segment elevation acute myocardial infarction (2007). For the ACS indication, Plavix is to be administered in combination with acetylsalicylic acid (ASA). Most recently, on February 16, 2011, Plavix in combination with acetylsalicylic acid for the prevention approved atherothrombotic and thromboembolic events, including stroke in patients with atrial fibrillation who have at least one risk factor for vascular events and for whom treatment with an anticoagulant is unsuitable.¹

Pradax (dabigatran etexilate) is an oral anticoagulant (direct thrombin inhibitor) that was initially approved in Canada in 2008 for the prevention of venous thromboembolic events in patients who have undergone elective total hip or knee replacement. An additional indication for the use of Pradax, the prevention of stroke and systemic embolism in patients with atrial fibrillation, was approved on October 26, 2010.²

As noted above, Plavix is indicated for patients for whom treatment with an anticoagulant is unsuitable. Because Pradax is an anticoagulant, it should not be given to such patients. A mix-up between Plavix and Pradax could have serious consequences. If a patient is supposed to receive Plavix, but Pradax is supplied (e.g., the prescription is written incorrectly or the wrong drug is dispensed) the patient will not experience the desired antiplatelet effect and could be at increased risk of bleeding. Similarly, if a patient is supposed to receive Pradax, but Plavix is supplied, the patient will not experience the desired anticoagulant effect.

Both Plavix and Pradax begin with the letter "P," so the 2 drugs may be stored in close proximity in medication storage areas. In addition, the typical dosage strength for Pradax may overlap with the dosage strength for Plavix, which increases the potential for mix-ups.

Plavix is available in 75 mg and 300 mg tablets (Figure 1). Pradax is available in 75 mg, 110 mg, and 150 mg capsules (Figure 2).²

Recommendations

- Include the generic name (clopidogrel for Plavix, dabigatran etexilate for Pradax) throughout the medication-use process (e.g., prescribing, transcribing, dispensing).
- If the brand name is being communicated verbally, include its spelling.
- Review storage locations for the 2 drugs. Consider opportunities to differentiate the products, such as ensuring that they are not stored in close proximity and/or using a warning label.
- Consider an automated alert for computerized prescriber and pharmacy order entry systems.

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Figure 1.
From top to bottom:
clopidogrel (Plavix)
75 mg and 300 mg
tablets. Tablets are pink.

Photo: 2011 Compendium of Pharmaceuticals and Specialties (CPS), electronic version.



Figure 2. From top to bottom: dabigatran etexilate (Pradax) 75 mg, 110 mg, and 150 mg capsules. The capsules are light blue and cream in colour.

Photo: 2011, Boehringer Ingelheim (Canada) Ltd

- Involve patients (and their family members) in the medication-use process. For example, inform patients of the brand and generic names of each prescribed medication and the appearance of the pills (e.g., tablet versus capsule). A consumer alert about this type of mix-up is being released simultaneously (http://www.safemedicationuse.ca/alerts/index.html), and practitioners are encouraged to provide this information to patients for whom Pradax or Plavix is ordered.
- Support initiatives that foster the use of medication reconciliation. Medication reconciliation is an important safety initiative, and the incident described above highlights its value.
- Share this bulletin to alert all practitioners and to raise awareness of this issue.

ISMP Canada has notified the manufacturers of Pradax and Plavix, as well as other stakeholders about the potential confusion between these drug names.

References

- 1. Plavix [product monograph]. Laval (QC): sanofi-aventis Canada Inc.; 2011 Feb 14 [cited 2011 May 10]. Available from http://webprod.hc-sc.gc.ca/dpd-bdpp/index-eng.jsp (Health Canada Drug Product Database; search term "Plavix" as product name).
- 2. Pradax [product monograph]. Burlington (ON): Boehringer Ingelheim (Canada) Ltd.; 2010 Oct 26 [cited 2011 May 10]. Available from http://webprod.hc-sc.gc.ca/dpd-bdpp/index-eng.jsp (Health Canada Drug Product Database; search term "Pradax" as product name).

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ISMP Canada is a national voluntary medication incident and 'near miss' reporting program founded for the purpose of sharing the learning experiences from medication errors. Implementation of preventative strategies and system safeguards to decrease the risk for error-induced injury and thereby promote medication safety in healthcare is our collaborative goal.

Medication Incidents (including near misses) can be reported to ISMP Canada:

(i) through the website: http://www.ismp-canada.org/err_report.htm or (ii) by phone: 416-733-3131 or toll free: 1-866-544-7672.

ISMP Canada can also be contacted by e-mail: cmirps@ismp-canada.org. ISMP Canada guarantees confidentiality and security of information received, and respects the wishes of the reporter as to the level of detail to be included in publications.

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