LETTERS TO THE EDITOR

Writers Challenge Points Made in Article About Antiemetic Therapy

We are writing this letter in response to the continuing education article by Cassandra Marek, RN, BSN, OCN®, in the March/April 2003 issue, titled "Antiemetic Therapy in Patients Receiving Cancer Chemotherapy" (Vol. 30, pp. 259–271). Marek's article contains inaccuracies that should be corrected.

- Marek implied that ondansetron is approved for use only with moderately emetogenic chemotherapy. In fact, ondansetron is approved for use with both highly and moderately emetogenic chemotherapy (GlaxoSmithKline, 2003).
- The article stated that dolasetron and ondansetron are associated with mild QTc prolongation. In fact, dolasetron is the only product with warning and precaution statements related to QTc prolongation in the prescribing information. However, all 5-HT_3 products have cardiovascular side effects observed during clinical trials that are noted in the product information (Aventis Pharmaceuticals, 2003; GlaxoSmithKline, 2003; Roche Pharmaceuticals, 2003).
- When discussing ondansetron in the transmucosal delivery section of the article, Marek claimed that "special technique" is required to take Zofran (ondansetron HCl) Orally Disintegrating Tablets® (ODTs). In fact, Zofran ODTs are not administered transmucosally; the tablets dissolve on the tongue in a few seconds for absorption through the gastrointestinal tract. No technique or dexterity is required (GlaxoSmithKline, 2003). An important clinical advantage of Zofran ODTs is that they can be taken without water. That convenience can be a benefit to all patients, not just those who are unable to swallow oral medications.
- The dosing information for ondansetron outlined in the article was incomplete and failed to mention other useful dosing options for prevention of nausea and vomiting, including the following.
  - 32 mg IV beginning 30 minutes prior to chemotherapy
  - Three 0.15 mg/kg infusions beginning 30 minutes prior to chemotherapy, with the second and third infusions administered four and eight hours after the first dose
  - A single 24 mg tablet 30 minutes prior to chemotherapy (highly emetogenic chemotherapy only)
  - 8 mg orally twice daily following moderately emetogenic chemotherapy
- Marek wrote that "researchers suggest that granisetron may be the most effective for the prevention of acute nausea and vomiting caused by moderately or highly emetogenic chemotherapy" (p. 265). This statement then was contradicted in the next paragraphs, in which the Perez et al. (1998) and Gralla et al. (1999) studies were discussed. According to those reports, ondansetron and granisetron were found to be equally effective. In addition, American Society of Clinical Oncology guidelines state that all 5-HT_3 receptor antagonists are considered equivalent at equipotent doses (Gralla et al.).

Continuing education materials must present unbiased and accurate information.

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Aventis Pharmaceuticals. (2003). Anzemet® (dolasetron) [Package insert]. Bridgewater, NJ: Author.

GlaxoSmithKline. (2003). Zofran® (ondansetron HCl) [Package insert]. Research Triangle Park, NC: Author.

Gralla, R.J., Osoba, D., Kris, M.G., Kirkbride, P., Hesketh, P.J., Chinnery, L.W., et al. (1999). Recommendations for the use of antiemetics: Evidence-based, clinical practice guidelines. *Journal of Clinical Oncology, 17,* 2971–2994.

Perez, E.A., Hesketh, P., Sandbach, J., Reeves, J., Chawla, S., Markman, M., et al. (1998). Comparison of single-dose oral granisetron versus intravenous ondansetron in the prevention of nausea and vomiting induced by moderately emetogenic chemotherapy: A multicenter, double-blind, randomized parallel study. *Journal of Clinical Oncology, 16,* 754–760.

Roche Pharmaceuticals. (2003). Kytril® (granisetron) [Package insert]. Nutley, NJ: Author.

The Author Responds

Thank you for the opportunity to respond to these questions. Despite the appearance of disagreement on certain points within the article, I believe that Poniatowski and Sweeney and I agree that the management of chemotherapy-induced nausea and vomiting represents an important opportunity for healthcare professionals to affect quality of life for patients with cancer and their families. We must continue to study, research, and communicate with each other to find the best tools—and the best ways to use these tools—to promote their health and well-being.

As is clearly stated in the article, ondansetron has been approved for use in patients receiving both moderately and highly emetogenic chemotherapy. Studies comparing the efficacy of ondansetron to that of other serotonin receptor antagonist drugs have not found any of the drugs in this class to be superior to the others in effectiveness against nausea and vomiting (Anastasia, 2000; Dranitsaris et al., 2001; Gralla et al., 1998, 1999; Perez et al., 1998). However, granisetron still may be the drug of choice for patients in whom cardiac stability is a concern. Although studies (Anastasia; Valley, 2000) suggest that these drugs, dolasetron and ondansetron in particular, have been associated with mild, prolonged QT intervals, all continue to be useful tools in the prevention and treatment of chemotherapy-induced nausea and vomiting.

Although the technique for correctly placing a Zofran ODT in a patient's mouth may be simple to learn, it still requires that the administrator be taught the technique and that it be performed consistently to ensure proper delivery of the medication. I agree that this technology provides an important alternate route of delivery for patients who cannot swallow medications easily.

Finally, I appreciate the expanded dosing information provided by the authors of the letter. The information in the article was compiled after reviewing the clinical practice guidelines as established by practice experts; I would expect that as more research is performed on the most effective administration schedules for antiemetic therapy, these guidelines will be updated to reflect current practice.

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Perez, E.A., Hesketh, P., Sandbach, J., Reeves, J., Chawla, S., Markman, M., et al. (1998). Comparison of single-dose oral granisetron versus intravenous ondansetron in the prevention of nausea and vomiting induced by moderately emetogenic chemotherapy: A multicenter, double-blind, randomized parallel study. *Journal of Clinical Oncology, 16,* 754–760.

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