Collaborative Practice Enhances Supportive Care in Cancer: Chemotherapy-Induced Nausea and Vomiting

In a 1992 article that appeared in the *British Journal of Cancer*, Martin wrote that antiemetic therapy for chemotherapy-induced nausea and vomiting (CINV) had significantly changed over the past few years, and that the majority of oncologists' attitudes about controlling CINV had changed from excessive pessimism to (perhaps) unrealistic optimism (Martin, 1992). In this article, Martin discussed the "old myths" of antiemetic control in the 1970s, when patients did not get prophylactic antiemetics before emetogenic chemotherapy: Oncologists thought CINV was a minor problem, vomiting was inevitable (and maybe a small price to pay for lifesaving therapy), and antiemetics were of little or no value for CINV.

Of course, by the 1990s, ondansetron—the first serotonin 5-HT_3 receptor antagonist—had become available, and the value of dexamethasone and combination antiemetic therapy had been established. This led to what Martin termed "the new myths": *Almost all patients have complete control of vomiting with these antiemetics, thus CINV is no longer an important problem*. This was the prevailing attitude, even though about a third of patients vomited on the day of chemotherapy.

IS 'GOOD ENOUGH' REALLY ENOUGH?

It seems we may now be in the next phase of the so-called new myths. The number of published antiemetic studies exploded with the introduction of cisplatin, a highly effective drug for a broad range of cancers as well as the epitome of highly emetogenic chemotherapy (HEC). The number of antiemetic studies published each year from 1983 to 2008 was high and stable, but this statistic has steadily decreased since then (Andrews & Sanger, 2014). Why are the numbers of antiemetic studies—particularly for CINV—dropping off? Perhaps it is because there is no new class of "blockbuster" pharmaceutical antiemetics on the horizon. Or maybe it is because some clinicians view reports of complete prevention of *acute* vomiting in 70% to 80% of patients receiving HEC as good enough (Perwitasari et al., 2011).

In truth, it is the 20% to 30% of patients who *do* experience acute or delayed vomiting and the 50% to 70% who suffer nausea—acute or delayed—who require our greatest concern. Most antiemetic studies continue to focus on the prevention of vomiting and do not examine nausea separately, despite the fact that persistent nausea may have a significantly greater negative effect on psychological well-being and distress, physical health, social functioning, fatigue, and quality of life than vomiting (Pirri et al., 2013).

While we recognize the importance of randomized, double-blind, prospective studies that analyze objective data, we know that this evidence alone cannot tell us everything we need to know about how to best care for our patients.

CINV SYMPOSIUM AT *JADPRO* LIVE

This past January, at the first annual *JADPRO* Live meeting held in St. Petersburg, Florida, three faculty members presented an educational program entitled "Collaborative Practice Enhances Supportive Care in Cancer: Chemotherapy-Induced Nausea and Vomiting" to a diverse audience of advanced practitioners in oncology.

The goal of the live symposium, and now this supplement to *JADPRO,* was to share the evidence

from clinical trials and bench research and to augment these data with clinical expertise, insights, and judgment of the faculty and the audience. This model reflects the process and outcomes of actual oncology or palliative care teams: Each member respects and values the different insights and suggestions from other team members, ultimately leading to enhanced patient care and team satisfaction.

The specific learning objectives associated with the symposium and this supplement are as follows:

- Review physiologic, drug, and patient factors as they relate to risk calculation and assessment of CINV
- Discuss current standard-of-care interventions for moderately and highly emetogenic chemotherapy (MEC and HEC) and clinical or economic factors that could limit best antiemetic use
- Summarize drugs and products in development that aim to enhance CINV prevention and management
- Engage in a collaborative discussion to develop strategies to maximize CINV management

THREE KEY ASPECTS OF CINV

The articles in this supplement are expanded versions of material that was presented and discussed at the live symposium by the interprofessional faculty team: physician assistant Teresa Scardino, clinical pharmacist Sally Barbour, and advanced practice nurse Rita Wickham.

The first article, by Teresa Scardino, focuses on the critical knowledge base regarding the mechanisms of nausea and vomiting in general and CINV in particular, risk factors for CINV, and reliable and clinically practical tools to assess and document the *patient's* view of their experience.

The next article, by Sally Barbour, provides scientific data and (1) helps us formulate how we should translate the evidence from antiemetic studies into practical and effective clinical practice, (2) summarizes the similarities (and differences) in antiemetic guidelines from major oncology professional societies and groups, and (3) stimulates us to think about clinical implications associated with the use of current standard-of-care antiemetics.

In the third article, Rita Wickham gives a brief historical perspective of antiemetic research for CINV. The article covers how we got from there to here, reviews how researchers are starting to look at control of vomiting and of nausea as both *important* as well as *separate* outcomes, and takes a look at antiemetic products in the research pipeline.

The last article expands upon a case study that was discussed by the faculty and audience members during the live symposium. This case is meant to represent "typical" patients for whom many of us provide care or consultative assistance. They may experience more problematic CINV than we anticipated, and they may be desperately looking for information on the Internet (and may be more tech savvy than we are). Helping these patients achieve the best antiemetic control as early as possible can be a continuing challenge, but it is imperative.

THE COLLABORATIVE MODEL

As mentioned above, the symposium took place at the first annual *JADPRO* Live meeting, during which our new professional organization was launched: the Advanced Practitioner Society for Hematology and Oncology (APSHO). It seems quite fitting that this gathering, which focused on collaborative practice, was the setting for an interprofessional team of oncology advanced practitioners and an interactive and knowledgeable audience to discuss the key issues surrounding CINV today.

Faculty Members
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