ASCO Clinical Practice Guidelines and Beyond

Gary H. Lyman, MD, MPH

By Gary H. Lyman, MD, MPH

Venous thromboembolism and its complications, including pulmonary embolism and death, are increasingly recognized as important complications of cancer and cancer treatment.[1,2] A summary of the most recent American Society of Clinical Oncology (ASCO) guidelines entitled "Recommendations for Venous Thromboembolism Prophylaxis and Treatment in Patients With Cancer"is presented in this issue of the *Journal of Oncology Practice* (*JOP*).[3] Continuing in the tradition of ASCO guidelines, this heavily evidence-based compendium of recommendations from an expert panel will be published in full in the *Journal of Clinical Oncology* (*JCO*).[4] Guideline Summaries published routinely in *JOP* distill the full guideline down to the major recommendations and other essential issues.[5] Since their initiation in 1994, the ASCO clinical practice guidelines have been well received and represent one of the major benefits of ASCO membership along with the Annual Meeting and *JCO*. In 2006, five of the top 10 article downloads from the *JCO* were ASCO clinical practice guidelines. The process of developing ASCO guidelines is rigorous and summarized in a Methodology Manual available at ASCO.org.[6] Following review and approval of a guideline proposal, an extensive systematic literature review is conducted often culminating in a meta-analysis of the evidence followed by a lengthy development process with a panel of both content and methodology experts producing a document with explicit recommendations that undergoes exhaustive internal and external review before final approval by the Panel, the Health Services Committee and the ASCO Board of Directors before publication in *JCO*.

Despite the apparent success of the ASCO guidelines, concern has been expressed about the utility and value of the guidelines document. Although published online as well as in print, it represents a formidable, often lengthy document packed with information about the supporting evidence which is discussed at length. Some have questioned whether the downloaded or printed guideline manuscripts are actually read and incorporated into clinical practice in a fashion in which they might favorably influence care of patients with cancer. Nearly three years ago, a number of initiatives were undertaken in an effort to better summarize, highlight, and disseminate the essential elements of the ASCO guidelines. These now include publication of the Guideline Summary in *JOP* along with supporting clinical tools sometimes available as tear outs in the published version and always available online for downloading. PowerPoint slides are developed and available online for use in continuing medical education programs related to guideline topics. In addition, patient guides to the guidelines are developed and are available online as well as through Patients Living With Cancer (PLWC). Recent initiatives to improve the breadth and timeliness of ASCO guidelines include a process for review and endorsement of evidence-based guidelines as well as other collaborations with respected professional organizations and now a mandated full review and, when indicated, a guideline update every two years.

As seen in the Venous Thromboembolism Summary in this issue of *JOP*, ASCO recommends consideration of prophylactic anticoagulation, if not contraindicated, in hospitalized patients with cancer; in cancer patients undergoing major surgical procedures; and in selected ambulatory patients with cancer receiving certain high risk regimens such as patients with multiple myeloma receiving thalidomide or lenalidomide in combination with chemotherapy or dexamethasone. Patients with cancer with established venous thromboembolism and no contraindication should receive subcutaneous heparin for up to 6 months and even longer in those receiving treatment for active cancer. Despite intriguing data, the ASCO Guideline Panel does not recommend the routine use of anticoagulants in cancer patients without venous thromboembolism to improve patient survival. These recommendations are based, in part, on a comprehensive systematic review prepared for the Panel, a portion of which was recently published.[7] Other derivative products which have been developed include a PowerPoint slide set, algorithms, an anticoagulant order and flow sheet and a treatment dosing and schedule tool. In addition, a categorical course on Cancer and Thrombosis has been proposed for the 2008 annual meeting to highlight the ASCO Venous Thromboembolism guidelines as well as review much of the evidence behind these recommendations.

Despite all of these efforts, however, concern remains with regard to how well ASCO guidelines and their derivative products are disseminated, integrated into practice and appropriately utilized to enhance the optimal care of people with cancer. There are limited data on the actual impact of clinical practice guidelines on clinical decision making and overall patient care. Many strategies have been proposed to further enhance the impact of guidelines. The integration of guideline recommendations into the electronic health record has been discussed. Computer alert programs have been shown to increase the use of prophylactic anticoagulation reducing the risk of deep venous thrombosis and pulmonary embolism among hospitalized medical patients.[8] This

represents one of the potential complementary efforts under consideration to further enhance the use, utility, and value of ASCO clinical practice guidelines. Ultimately, demonstration of a direct impact of guidelines on clinical decision making, quality of patient care, reduction in medical errors, or even reduction in overall morbidity or mortality should be sought. However, the steps already taken and the strategies now in place represent important early steps toward achieving the goals shared by all ASCO members of reducing suffering and enhancing quality care for all patients with cancer.

Dr Lyman is Director, Health Services and Outcomes Research and Oncology Senior Fellow, Center for Clinical Health Policy Research at Duke University Medical Center in Durham, North Carolina. Dr Lyman also serves as Associate Editor on the JOP Editorial Board.

References

1. Khorana AA, Francis CW, Culakova E, et al: Thromboembolism in Hospitalized Neutropenic Cancer Patients. J Clin Oncol 24:484-490, 2006

2. Khorana AA, Francis CW, Culakova E, et al: Thromboembolism is a leading cause of death in cancer patients receiving outpatient chemotherapy, J Thromb Hem 5:632-634, 2007

3. American Society of Clinical Oncology 2007 clinical practice guideline recommendations for venous thromboembolism prophylaxis and treatment in patients with cancer. doi:10.1200/JOP.0768502

4. Lyman GH, Khorana AA, Falanga A et al: American Society of Clinical Oncology Guideline: Recommendations for Venous Thromboembolism Prophylaxis in Patients with Cancer. J Clin Oncol 2007

5. Wolff AC, Desch CE. Clinical Practice Guidelines in Oncology: Translating Evidence Into Practice (and back). J Oncol Pract 1:160–161, 2005

6. ASCO Methodology Manual. http://www.asco.org/ASCO/Downloads/Cancer%20Policy%20and%20Clinical%20Affairs/Clinical%20Affairs%20(derivative%20products)/Methodology%20Manual-12.19.06.pdf

7. Kuderer NM, Khorana AA, Lyman GH, and Francis CF: A Meta-Analysis and Systematic Review of the Efficacy and Safety of Anticoagulants as Cancer Treatment: Impact on Survival and Bleeding Complications. Cancer 110:1149-1160, 2007

8. Kucher N, Koo S, Quiroz R, et al: Electronic Alerts to Prevent Venous Thromboembolism among Hospitalized Patients. N Engl J Med 352:969-977, 2005

DOI: 10.1200/JOP.0761501