Editorial

Does postoperative radiation therapy benefit patients with esophageal cancer?

Lawrence Kleinberg

Department of Radiation Oncology and Molecular Radiation Sciences, Johns Hopkins University, Baltimore, MD

J Gastrointest Oncol 2010; 1: 70-71. DOI: 10.3978/j.issn.2078-6891.2010.015

A review article may have several important purposes. Primarily it can serve as a setting where important data is collected with a goal of making it easier for physicians' and trainees to become expert in an area and make the best treatment recommendations. However, an outstanding review article also provides new insight into the proper interpretation of the mass of available data. Esophageal cancer management is particularly in need of such a skilled overview as there are many treatment options but little data to provide real clarity about the burdens and benefits of the options under individual clinical circumstances. Jabbour and Thomas are to be congratulated for not only compiling an enormous amount of data, but doing this in a refreshing way that provides insight into the proper management of esophageal cancer (1).

The stated purpose of this review article is primarily to evaluate the data that applies to radiation therapy in the postoperative management of esophageal cancer. However, the authors comprehensively review the many potential roles of radiation therapy in definitive management of locally advanced esophageal cancer, whether given definitively, preoperatively, or postoperatively. The controversy about adjuvant and neoadjuvant chemotherapy is addressed. This choice of a comprehensive review of the data contributed greatly to the value of this review article, allowing context to be placed on the data related to postoperative therapy, and in reality to provide a review more comprehensive than the goal implied by the title of the article.

There are not well done definitive randomized trials

No potential conflict of interest.

Corresponding author: Lawrence Kleinberg, MD, Associate Professor, Department of Radiation Oncology and Molecular Radiation Sciences, Johns Hopkins University, 401 North Broadway, Suite 1440, Baltimore, MD 21231. Tel: 410-614-2597; Fax: 410-501-1419. Email: Kleinla@jhmi.edu.

Submitted Nov 13, 2010. Accepted for publication Nov 20, 2010. Available at www.thejgo.org

ISSN: 2078-6891

© 2010 Journal of Gastrointestinal Oncology. All rights reserved.

to compare the outcome of postoperative therapy against preoperative therapy in esophageal cancer with modern staging and modern treatment techniques. In the United States preoperative therapy is commonly used in studies at major institutions in cooperative groups and this appears to have shaped routine clinical practice. The potential value of preoperative therapy is that adjuvant therapy could be started immediately targeting any micro metastatic deposits without allowing time for further growth, and treatment would not be given until diagnosis and staging is firmly assessed. In addition, prior to surgery it is thought that the patient' s may be better able to tolerate aggressive chemotherapy and radiation as it can start immediately and their physical and nutritional state has not been burden by the need to recover from surgery. On the other hand when therapy is given postoperatively full staging information is available and patients who have more extensive disease discovered at the time of surgery may be spared aggressive treatments and patients with earlier stage of disease than expected may also not require such treatment.

The review article has several informative and important tables that provide an overview of the management of esophageal cancer. In particular, table 1 addresses preoperative versus postoperative therapy. Information is provided about the potential pros and cons which is of significance, and yet no definitive conclusions are prevented in this review article which is appropriate given the lack of definitive data. More recently a large randomized trial published by Macdonald but including mostly gastric cancer patients and only a small proportion of patients with GE junction tumors demonstrated a substantial survival benefit to postoperative therapy (2). Data that might support specific conclusions about GE junction esophageal tumors was not provided, likely because an insufficient number of patients were in this category.

Discussion as to why it is difficult to develop definitive conclusions about these different approaches may be appropriate. Certainly, the bias of treating physicians and patients related to use of these very different approaches has limited randomization. The large size of a trial that designed to properly establish differences in survival that are likely to be modest (i.e. the range of 10-15% in long term survival), is difficult to do in esophageal cancer, a relatively uncommon tumor. While it would certainly appropriate to close this article with a routine statement that definitive randomized data is needed, such information is unlikely in the near future and this review article actually provides information important to guiding therapy for patients here and now while studies are done around the world.

References

- 1. Jabbour SK, Thomas CR. Radiation therapy in the postoperative management of esophageal cancer. J Gastrointest Oncol 2010; 2: 102-111.
- 2. Macdonald JS, Smalley SR, Benedetti J, et al. Chemoradiotherapy after surgery compared with surgery alone for adenocarcinoma of the stomach or gastroesophageal junction. N Engl J Med 2001;345:725-730