

TREATMENT ADVANCES FOR THOSE WITH ESOPHAGEAL CANCER

by: **Gil Lederman, MD**

New data is emerging for a variety of cancers. While combined modality treatment is not always a panacea, early information suggests a survival benefit for those with adenocarcinoma of the esophagus.

The esophagus connects the throat with the stomach. Cancers of this site are notorious for local symptoms such as difficulty swallowing, pain or bleeding. Occasionally metastatic or distant spread is the first sign of illness.

Adenocarcinomas often have spread beyond the esophagus affecting the lymph nodes nearly nine times out of ten. After surgery, less than 10% of patients survive five years.

Unfortunately because many cancers have spread at the time of surgery, standard operative results have not been very successful.

A report by Walsh et al from Ireland in the prestigious **New England Journal of Medicine** has evaluated combination chemotherapy and radiation followed by surgery as treatment of this disease.

Because of poor results with surgery alone, an evaluation was undertaken comparing the use of chemotherapy and radiation together followed by surgical resection to surgery alone. The combination chemotherapy consisted of Fluorouracil and Cisplatin with 4000 Centigray (cGy) radiation followed by surgery. Centigray are units of the radiation delivered to a patient. The radiation dose is modest. The drugs are commercially available. Patients had to be less than 76 years of age, have no obvious distant metastases and have adequate blood testing among other baseline criteria to fit into the treatment program.

All patients had physical examination, chest x-rays, ultrasound examination of the abdomen and endoscopy of the upper gastrointestinal tract. Chemotherapy included two courses of these two agents. Radiation was begun on the first day of chemotherapy, with surgery being performed eight weeks after beginning of treatment. It would be delayed if blood counts were low.

Between 1990 and 1995 113 patients with adenocarcinoma of the esophagus were seen and 58 were randomly allocated to receive chemotherapy and radiation while 55 patients received radiation alone. The median follow-up was ten months.

The authors described the toxicity of treatment as "low." Post-operative complications were respiratory in 28 in the group that had received chemotherapy/radiation prior to surgery and 32 in the group that had surgery only. Other less common complications were reported in both groups.

A complete response meaning no evidence of cancer in those who received combination chemotherapy and radiation, was seen in one-quarter of the patients undergoing subsequent surgery.

The survival rates three years after treatment were 37% in the group receiving multi-modality therapy compared to 7% in the surgery only group.

The authors concluded, "Multi-modal therapy followed by surgery provides a significant survival advantage over surgery alone at three years for patients with adenocarcinoma of the esophagus. Although 17% of the patients in the multi-modal group were withdrawn because of protocol violations, direct treatment-related toxic events were minimal. The evidence suggests that multi-modal therapy should be considered in all patients with tumor confined to the esophagus and draining lymph nodes."

In an accompanying editorial in **New England Journal of Medicine**, written by Wilke and Fink, those reviewers cautioned that "Multi-modal therapy should be restricted to patients with sufficient physiological reserve to withstand not only its complications but also the surgical resection. Randomized trials that investigate the optimal type of pre-operative therapy for particular subgroups are needed before multi-modal therapy for adenocarcinoma of the esophagus and esophagogastric junction can be widely recommended."

Thus, early data appears promising in this once difficulty-to-treat malignancy. This treatment is certainly available to those who believe a most aggressive approach will yield greater results.

Our approach at Radiosurgery New York is to offer fractionated stereotactic body radiosurgery for those with esophageal and other cancers. Stereotactic body radiosurgery offers a more precise delivery of radiation than standard radiation. Because so many of the esophageal cancers are located close to the heart and other vital organs such as the spine, more precise delivery of the radiation better focuses the beam. We are also able to give higher doses when called for. Higher doses seem to be more effective with more local control. Local control means that the cancer – where it started – has a greater ability to be controlled. If cancers can be controlled to a higher degree then there should be a higher cure rate. Control rate is defined as cessation of growth, shrinkage or disappearance of the tumor in the treated field.

Stereotactic body radiosurgery also allows us to treat metastases such as to the lymph nodes and liver. In the area where we aim the beam, our local control rate is approximately 80 to 90%. Stereotactic body radiosurgery is a non-invasive method of treatment and is highly desirable for a variety of esophageal and other cancers.

We have seminars open to the public to explain stereotactic body radiosurgery in more detail. We also have a hot line at 212-CHOICES or send e-mail questions to gjl.lederman@rsny.org.