Researchers Investigate Long- and Short-Term Androgen Suppression Plus Radiation

Researchers from Fox Chase Cancer Center in Philadelphia, PA, presented data from a recent study comparing radiation plus long-term androgen suppression with short-term androgen suppression. The study included 1,520 men with locally advanced prostate cancer who were treated with external beam radiation and androgen suppression hormones. All patients received goserelin and flutamide for two months prior to radiation and two months during radiation. Patients then were randomized to receive either an additional 24 months of goserelin and no treatment. After five years of follow-up, 4.3% of the patients in the long-term group and 7.2% of the patients in the short-term group died of prostate cancer. Metastatic disease occurred in 10% of the long-term group and 16% of the short-term group. Stable prostate-specific antigen levels occurred in 78% of the long-term group in comparison to 53% of the short-term group. A 10% survival advantage was noted in a subgroup of patients with aggressive prostate cancer (Gleason 8–10) who received long-term androgen suppression.

Radiotherapy Not Associated With Myocardial Infarction

Results from a study conducted at Princess Margaret Hospital in Toronto, Ontario, Canada, suggest that radiotherapy to the left breast is not associated with increased risk of myocardial infarction (MI). The study included 2,128 women with early-stage breast cancer treated with conventional fractionated radiotherapy following lumpectomy. Median age was 54 years, and 8% of the participants had a previous history of cardiovascular disease, with similar incidence in women with left- and right-sided breast disease. Of the 1,074 women treated for left-sided breast cancer, 18 had nonfatal and 8 had fatal MIs. Of the 1,054 women treated for right-sided breast cancer, 17 had nonfatal and 6 had fatal MIs. The overall survival rate was 81% at 5 years and 67% at 10 years, rates typical of women with early-stage breast cancer.

Study Investigates Correlation Between Smoking and GI Complications

Researchers from the University of Texas M.D. Anderson Cancer Center in Houston presented results from a recent study investigating the influence of smoking and the risk of gastrointestinal (GI) complications following radiation treatment for cervical cancer. The study examined smoking history, race, age, and GI complications in 3,489 patients with invasive cervical cancer from 1960–1994. The overall rate of GI complications was 6.6% at 5 years and 7.9% at 10 years, with smokers (n = 1,172) having more than twice the complications of nonsmokers (n = 2,143). A strong correlation existed between pack-per-day smoking history and GI complications. Patients who had never smoked had less than a 2% risk of developing major small bowel complications. Patients who smoked half a pack or less per day had a 5% risk, pack-a-day smokers had a 9% risk, and heavy smokers had a 13% risk of developing small bowel complications. Race and weight also were found to correlate with GI complications. The rate of GI complications was substantially lower in Hispanic women in comparison to African American and white women. Women with a body mass index of less than 21 also had a higher rate of GI complications.

Additional Radiation May Reduce Breast Cancer Recurrence

A new study suggests that patients with breast cancer under age 50 who choose lumpectomy and radiation should receive an additional boost of radiation. The study of 5,569 women, conducted at The Netherlands Cancer Institute, found that a 16 Gy boost of radiation given at the end of five weeks of radiation treatment dramatically reduced the risk of local recurrence. Patients in the study had stage I or II disease with tumors up to 5 cm in diameter. A 48% reduction in local recurrence rates occurred for women ages 41–50, and a 54% reduction occurred in local recurrence rates for women under 40. The five-year survival rate for all women in the study was 91%.

Twice-Daily Radiation May Benefit Patients With Throat Cancer

Researchers from Princess Margaret Hospital in Toronto, Ontario, Canada, reported results from a recent study investigating intense radiation therapy and survival rates in patients with locally advanced laryngeal or pharyngeal cancer. The study included 331 patients who were given twice-daily or once-daily radiation therapy. At five years, patients treated twice a day had a 40% survival rate in comparison to a 30% survival rate in patients treated once a day. In addition, 55% of patients treated twice a day compared to 45% treated once a day were able to preserve their pharynx. The higher doses of radiation did not increase late toxicities; however, patients did experience higher grades of mucositis of the mouth and throat more frequently when treated twice a day.

Concomitant Radiation and Chemotherapy May Increase Survival in Patients With NSCLC

A recent study conducted at the University of Texas M.D. Anderson Cancer Center in Houston suggests that patients with locally advanced non-small cell lung cancer treated with concomitant radiation and chemotherapy had significantly higher survival rates compared to patients treated with chemotherapy followed by radiation. The study included 592 patients who were randomized to one of the following treatment arms: chemotherapy followed by daily radiation therapy (arm 1), concurrent chemotherapy and daily radiation therapy (arm 2), or concurrent chemotherapy and twice-daily radiation therapy (arm 3). Patients treated with concurrent chemotherapy and once-daily radiation therapy had a median survival rate of 17.1 months in comparison to 14.6 months for patients treated with chemotherapy followed by radiation. Patients treated with chemotherapy and twice-daily radiation had a median survival rate of 16 months. Patients receiving twice-daily radiation therapy had a higher incidence of acute esophagitis, weight loss, and dehydration compared to patients who received once-daily radiation therapy.