Overall survival was 9.5, 11.1, 4.1, and 9.6 months for SRT, SRT + T, HRT, and HRT + T, respectively. On multivariable analysis, there was no significant difference in all-cause mortality between HRT + T and SRT + T ($P = .57$). In contrast, all-cause mortality was significantly higher for HRT alone ($P = .007$) and for SRT alone ($P = .03$) compared with SRT + T. Other factors associated with increased mortality were greater age, lower Karnofsky performance score (KPS), and multifocal tumors.

Although the groups were not significantly different in many aspects (such as gender, tumor size, and extent of resection), there were several important exceptions. For example, HRT ± T patients were older than the SRT ± T patients (median age, 79 vs 69 years, respectively) and had lower KPSs.

The authors concluded that adding T to HRT could substantially reduce, and possibly halve, the number of radiotherapy treatments needed for elderly patients with GBM. They recommend randomized trials to further elucidate the effectiveness of HRT + T compared with other treatments.

Concurrent Chemoradiotherapy Tolerated in Recurrent HNSCC

Written by Emma Hitt Nichols, PhD

Concurrent reirradiation and combined chemotherapy treatment were tolerable in patients with recurrent head and neck squamous cell carcinoma (HNSCC). Min Yao, MD, PhD, University Hospitals Case Medical Center, Cleveland, Ohio, USA, presented data from a multicenter prospective phase 2 study.

Due to the poor prognosis of recurrent HNSCC, there is an imperative to identify a safe and tolerable therapy course. Despite the prevalence of combined radiotherapy and chemotherapy, an optimal therapeutic regimen has not been elucidated. This study assessed limited-volume continuous-course intensity-modulated reirradiation (IMRT) and weekly cetuximab with platinum-based chemotherapy.

A total of 46 patients (26% female) with recurrent HNSCC and unresectable tumors or positive margins after surgery participated in this trial. All patients had an Eastern Cooperative Oncology Group performance status of 0 to 1 and previously received radiotherapy for >6 months without the combination of drugs used in this study.

Over the course of a 7-week period, patients received daily continuous-course IMRT at a dose of 60 to 66 Gy in 30 fractions to the gross tumor volume. During week 1, a loading dose of 400 mg/m^2 of cetuximab was administered. During weeks 2 to 7, concurrent cetuximab (250 mg/m^2) and cisplatinum (30 mg/m^2) were applied.

The 1-year overall survival rate was 60%, and at the final follow-up, 27 patients were alive. The 1-year disease-free survival rate was 38%. This therapeutic regimen had a range of grade 1 to 4 acute toxicities, with the most common higher-grade toxicities being lymphopenia, dysphagia, radiation-site dermatitis, mucositis, and anorexia. A single patient discontinued treatment.

Some patients experienced local toxicities 90 days after reirradiation, and the highest-grade complication was associated with dysphagia (grade 3). The most common late toxicities were dysphagia, xerostomia, edema, mucositis, fibrosis, and trismus.

The authors determined that patients with recurrent HNSCC could complete a concurrent reirradiation and chemotherapy trial. Further examination of treatment optimization for this disease stage is necessary.

FDG-PET in Cervical Cancer Patients Without Extrapelvic Metastasis

Written by Emma Hitt Nichols, PhD

Prescreens for extrapelvic lymph node metastases using ^{18}F-fluorodeoxyglucose positron emission tomography (FDG-PET) did not enhance survival rate but reduced the use of extended-field concurrent chemoradiation (CCRT). Ji-Hong Hong, MD, PhD, Chang Gung Memorial Hospital, Taoyuan, Taiwan, presented results of this prospective phase 3 trial.

Patients with cervical cancer in whom magnetic resonance imaging (MRI) identifies enlarged pelvic nodes may undergo further imaging with FDG-PET for further characterization. This study examined the impact of additional imaging on targeted radiation treatment and patient outcomes.

A total of 129 patients recently diagnosed with stage I to IVA cervical cancer participated in this study and had MRI-confirmed positive pelvic and negative paraaortic lymph nodes (PALNs). Patients were randomized to either a study group (51%) receiving FDG-PET or a control group (49%) assessed only by MRI. The FDG-PET group received irradiation with fields based on extrapelvic findings, while the control group received irradiation of the whole pelvic field.

There was no difference in freedom from extrapelvic metastasis between the FDG-PET and control groups