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NEWS RELEASE

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Most cancer-free in favorable-risk, HPV-positive head and neck cancer patients after lower intensity chemo and radiation

CHAPEL HILL – UNC Lineberger Comprehensive Cancer Center researchers found in a new study that lower treatment doses can be given successfully to a group of HPV-positive patients with oropharyngeal cancer of the back of the throat, leading to fewer side effects.

The study builds on previous research showing that oropharyngeal cancer patients who test positively for human papillomavirus (HPV) have higher response rates to radiation and chemotherapy and better prognoses than patients with HPV-negative cancer. In a study published in the *International Journal of Radiation Oncology Biology Physics*, the researchers reported that 86 percent of a group of highly selected, favorable-risk HPV-positive patients were cancer-free after receiving the lower doses. The findings were also presented at the American Society for Radiation Oncology (ASTRO) annual meeting, which is being held through Wednesday in San Antonio.

“This study shows promising data that suggests that we are probably over-treating these patients with the standard radiation and chemotherapy regimens,” said Bhishamjit S. Chera, MD, a UNC Lineberger member, an associate professor in the UNC School of Medicine Department of Radiation Oncology and the study’s first author and principal investigator. “We have shown that we may be able to safely lower the radiation and chemotherapy doses, while still maintaining excellent cancer control, and at the same time, reducing toxicity.”



There were 43 patients included in the phase II clinical trial who had favorable-risk, HPV-or-p16-positive oropharyngeal squamous cell carcinoma and a minimal smoking history. In the trial, the patients received weekly doses of 60 gray of radiation for six weeks and a dose of the chemotherapy drug cisplatin 180 milligrams per meter squared. The standard treatment is 70 gray for seven weeks and cisplatin 300 milligrams per meter squared, Chera said.

They checked the patients for complete pathologic response through a biopsy of the primary tumor site and after a limited neck surgery in the lymph node region. Eighty-six percent, or 37 out of 43 patients, had no evidence of cancer in their biopsy or surgical specimens after receiving the lower intensity chemotherapy and radiation treatment. The other six patients had microscopic residual foci of unknown significance that was removed in the planned biopsy and limited neck dissection, Chera said. All 43 patients were alive with no evidence of cancer recurrence at follow-up.

Chera also said they saw lower acute side effects under the lower treatment regimen. And while they hypothesized these earlier results are promising and should predict for excellent long-term cancer control and reduced long-term side effects, the researchers believe additional studies with the lower-dose radiation and chemotherapy regimen are needed.

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About UNC Lineberger

One of only 45 NCI-designated comprehensive cancer centers, the University of North Carolina Lineberger Comprehensive Cancer Center brings together some of the most exceptional physicians and scientists in the country to investigate and improve the prevention, early detection and treatment of cancer. With research that spans the spectrum from the laboratory to the bedside to the community, UNC Lineberger faculty work to understand the causes of cancer at the genetic and environmental levels, to conduct groundbreaking laboratory research, and to translate findings into pioneering and innovative clinical trials. For more information, please visit www.unclineberger.org.

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