Concurrent chemo and radiation confers survival benefit in nasopharyngeal carcinoma patients

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The combination of chemotherapy and radiation significantly improved the 5-year overall survival of patients with stage II nasopharyngeal carcinoma (NPC), according to a phase III study published Nov. 4 in *the Journal of the National Cancer Institute.*

Nasopharyngeal carcinoma is endemic in Southern China and Southeast Asia, where radiotherapy (RT) has been the primary treatment. Although the National Comprehensive Cancer Network (NCCN) recommends concurrent chemo-radiotherapy (CCRT) for stage II disease, evidence regarding its efficacy is weak, and this has not been defined as a primary endpoint in phase III trials.

To determine whether or not combined chemotherapy and radiotherapy confers survival benefit to stage II NPC patients, Qui-Yan Chen, M.D., Ph.D., of the Sun Yat-sen University Cancer Center in the People's Republic of China, and colleagues, conducted a phase III trial of patients randomly assigned to receive either radiation therapy (114 patients) or combined chemotherapy and radiation (116 patients).

They also found that after a median follow-up of 60 months, 22.8% of patients in the radiation group had disease progression, compared to 11.2% in the concurrent therapy group. The researchers found that 5-year overall survival, progression-free survival, and distant metastasis-free survival were statistically significantly higher in the concurrent

therapy group compared with the group receiving radiation alone.

The authors conclude that based on the results of this trial, which they believe to be the first phase III trial to compare CCRT and RT, the NCCN guidelines are reasonable. They hypothesize that early-stage disease may have a smaller distant tumor bulk, and thus CCRT may be more effective in eradicating distant micro-metastases. Although patients in the combined therapy group experienced more toxic side effects than patients who only received radiotherapy, the regimen was overall well tolerated when the chemotherapy drug dose was reduced.

Chen et al write, "In summary, we think that the optimal choice for early-stage NPC is cisplatin, at a weekly dose of 30 mg/m2, for both an optimal chemotherapy effect to eradicate small distant tumors and to ensure NPC patient compliance."

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