



**Treatment of Nasopharyngeal Cancer by Radiation Therapy**

*James Wong, MD, and C.C. Wang, MD, New York Hospital-Cornell Medical Center, New York, NY and Massachusetts General Hospital, Harvard Medical School, Boston, MA*

---

**Abstract**

Nasopharyngeal carcinoma (NPC) is an uncommon cancer in the US, accounting for approximately 0.2% of all malignant tumors. However, NPC is common in southern China, Hong Kong and Taiwan, representing approximately 20% of all cancers. The mainstay of treatment for localized NPC is high dose radiation therapy. In order to eradicate the NPC, a minimum dosage of 6,700 cGy is needed. In addition to the nasopharynx, other potentially involved sites such as the base of skull, the middle ear and the neck lymphatics are covered by the radiation fields. Multiple radiation treatments are employed to keep the dosage to the temporal bone, the spinal cord and the temporal-mandibular joint as low as possible to avoid subsequent complications.

Recent data from the Massachusetts General Hospital showed that the local control of the primary site was significantly improved when the patients were treated with a twice a day radiation regimen as compared to once-a-day regimen. The 5-year actuarial local control rates are summarized in the following table:

Table

We conclude that twice-a-day radiation regimen appeared to be more effective in controlling nasopharyngeal cancer than once-a-day regimen.