

# SMOKING AND HEAD AND NECK CANCER

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The smoking industry is aggressively attacking the government and groups' efforts of limiting cigarettes' intrusion into society. Never before has the battle been fought on such a wide plain.

A recent paper adding "smoke to the fire" is one sponsored by the National Cancer Institute of Canada and published in the prestigious New England Journal of Medicine. This study by Browman et al evaluated the impact of continued smoking on patients with diagnosed cancer of the head and neck area treated with radiation.

The authors note, "Cigarette smoking is an important risk factor for the development of squamous cell cancers of the head and neck. There is also evidence that patients with other forms of cancer who have a history of smoking have more advanced disease at the time of diagnosis than non-smokers, and that smokers with cancer have a worse prognosis than non-smokers." Alluded to was a study of patients with so-called small cell lung carcinoma. Those who continued to smoke after diagnosis of cancer did worse than those who stopped smoking. To evaluate the effect of continued smoking after diagnosis of cancer of the head and neck areas was made, a study was performed by questionnaire.

One hundred fifteen patients with squamous cell carcinoma of the head and neck area including the orocavity, oropharynx, hypopharynx and larynx were evaluated. All patients received radiation with or without chemotherapy of Fluorouracil.

The patients were evaluated by smoking history, alcohol intake history as well as the current status of smoking. Results of treatment were determined thirteen weeks after radiation was completed. Patients were either said to have a complete response which means no evidence of cancer or no response which means residual cancer.

Of the 115 patients, 62 patients said they did not smoke during radiation. These 62 patients were called "abstainers". Forty two percent had quit more than one year before diagnosis and 52% had quite less than twelve weeks before diagnosis. Six percent of the patients never smoked. Fifty three patients continued to smoke during radiation therapy.

Only 45% of these patients had a complete response compared to 74% of patients who abstained from smoking having a complete response. This was evaluated statistically and found to be significant. Two year survival rate was 66% in the group of abstainers compared to 39% in the group that continued to smoke. This also was evaluated and found to be statistically significant.

People who abstained from smoking had a median survival of 30 months compared to essentially half that (16 months) if continuing to smoke.

The authors concluded, "Among the patients with locally advanced Stage III or Stage IV squamous cell carcinoma of the head and neck who were treated with radiation with or without Fluorouracil, those who admitted continuing to smoke during therapy had a lower rate of response and survival than those who claimed to have abstained from smoking during treatment. The number of years spent smoking was also a significant prognostic variable."

As to the impact on the medical profession it was noted, "These results should encourage therapists to advise patients to stop smoking and investigators should be aware that smoking behavior may be an important confounding variable in clinical trials of radiation therapy in patients with head and neck cancer."