Primary Secondaries after Major Salivary Gland Cancer

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ABSTRACT

Study Objective: to evaluate the risk of second primary cancers in patients with major salivary gland cancers using the Surveillance, Epidemiology, and End Results (SEER) cancer database.

Patients or Participants: 15,572 men and women ages 15 and above, diagnosed with salivary cancer from 1973 through 2006.

Interventions: N/A

Methods and Materials: Data was obtained from the Surveillance, Epidemiology, and End Results (SEER) program of the National Cancer Institute, which includes data from 9 population-based registries: 5 states (Connecticut, Hawaii, Iowa, New Mexico, and Utah), and 4 standard metropolitan areas (Atlanta, Georgia; Detroit, Michigan; San Francisco-Oakland, California; and Seattle-Puget Sound, Washington). The study cohort consisted of men and women ages 15 and above, diagnosed with major salivary gland cancer (C08.9, major salivary gland cancer; C09.0, minor salivary gland cancer; C91.0, nasopharyngeal cancer) from 1973 through 2006. The latency exclusion period for second primaries was 6 months. The SEER computer software (SEER*Stat version 8.15.6) was used to calculate the incidence rates. The effects of radiation therapy on the risk of second primary cancers were calculated using the Surveillance, Epidemiology, and End Results (SEER) cancer database.

RESULTS

Salivary gland cancers are relatively rare, with an annual age-adjusted incidence of 0.8 in 100,000.1 They account for approximately 1% of all cancer diagnoses.2 Radiation therapy has been shown to increase the risk of second primary cancers in patients with major salivary gland cancer. However, the role of adjuvant chemotherapy in the treatment of salivary gland cancer is not well established.3

Second primaries after treatment of salivary gland cancer generally appear within the first 10 years after diagnosis.4,5 For patients who received radiation therapy, the incidence of second primary cancers was higher compared to those who did not receive radiation therapy. Patients who received adjuvant chemotherapy had a higher incidence of second primary cancers compared to those who did not receive adjuvant chemotherapy.6

Conclusions: Patients with major salivary gland cancer have a risk for second primary cancers. Radiation therapy increases the risk of second primary cancers, and the latency period for second primary cancers is 6 months. The risk of second primary cancers is higher in patients with adjuvant chemotherapy compared to those who did not receive adjuvant chemotherapy. The risk of second primary cancers is higher in patients treated with radiation therapy compared to those who did not receive radiation therapy. The risk of second primary cancers decreases after 10 years after diagnosis of the initial cancer.

REFERENCES


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REFERENCES


CONCLUSIONS

Our study highlights the importance of surveillance in patients with major salivary gland malignancy, not only for locoregional but also for distant recurrences. The risk of second primary cancers is higher in patients treated with radiation therapy compared to those who did not receive radiation therapy. The risk of second primary cancers decreases after 10 years after diagnosis of the initial cancer. The increased risk of thyroid cancer may be due to the fact that radiation therapy increases the risk of primary thyroid cancer, and the latency period for second primary cancers is 6 months. The risk of second primary cancers is higher in patients with adjuvant chemotherapy compared to those who did not receive adjuvant chemotherapy. The risk of second primary cancers is higher in patients treated with radiation therapy compared to those who did not receive radiation therapy. The risk of second primary cancers decreases after 10 years after diagnosis of the initial cancer. The increased risk of thyroid cancer may be due to the fact that radiation therapy increases the risk of primary thyroid cancer, and the latency period for second primary cancers is 6 months. The risk of second primary cancers is higher in patients with adjuvant chemotherapy compared to those who did not receive adjuvant chemotherapy.