TREATMENT RESULTS OF ORAL TONGUE CANCER

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Purpose: To evaluate the therapeutic results of oral tongue cancer patients treated with curative intent at the National Taiwan University Hospital.

Materials and Methods: From 1977 to 1994, 161 oral tongue cancer patients were treated by different modalities, including surgery alone (85 patients), radiotherapy alone (40 patients) and surgery followed by radiotherapy (36 patients). Patients were grouped according to the American Joint Committee on Cancer (AJCC) staging system. Among these 161 patients, 33 (20%) were categorized as stage I; 53 (33%) stage II; 37 (23%) stage III and 38 (24%) stage IV. All of them were squamous cell carcinoma with a male to female ratio of approximately 4:1. The treatment results of primary control, neck node control, outcomes and complications were analyzed.

Results: More than four fifths of the lesions were located on the lateral border of the tongue and less than 5% were either on the dorsum or undersurface. Primary control rates of T1 and T2 diseases in the OP alone group were 90% and 86%, respectively. The T3 patients of OP + R/T group had better primary control rate as 67%. Primary control of T4 disease was very poor in our three treatment groups. Even for the early disease, patients receiving surgical resection of primary tumor without further neck treatment have a higher risk (28%) of neck failure. Five-year survival rates of stage III patients were: R/T alone, 17%; OP alone, 24%; OP + R/T, 61%. Eighty-four percent and 72% recurrence in T3/T4 and T1/T2, respectively, occurred within one year after treatment. Overall, 86% recurrence occurred within the first 2 years. Sixteen patients (10%) showed evidence of distant metastasis; most commonly presented in the lung (75%). The risk of osteonecrosis was similar between OP + R/T group (6%) and R/T alone group (3%).

Conclusion: In our study, surgery can control primary tumors effectively in T1 and T2 lesions. Advanced (T3 and T4) disease is unlikely to be cured by radiation therapy or surgery alone and therefore is best managed by a planned combination of surgery and radiation therapy. For stage III group, five-year survival rate was significantly improved (p<0.05) for patients who were treated with surgery and postoperative radiotherapy. When the primary lesion is treated by simple excision, neck failure is not uncommon and adjuvant radiotherapy to the neck lymphatics may decrease its occurrence. There was 14% of recurrence occurred beyond the first 2 years which indicated that a long period of follow-up was important for tongue cancer patients.

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