Letters to the Editor

Elective Radiotherapy or Neck Dissection for CT-Staged T1–2N0 Oral Tongue Cancer

To the Editor:

The issue of elective treatment for clinically early-stage oral tongue cancer still remains controversial. This is based on the concern that subclinical nodal disease remains a significant feature of early oral tongue cancer, and surgical salvage rates of clinical neck recurrence are often poor. An article entitled “Prospective trial to evaluate staged neck dissection or elective neck radiotherapy in patients with CT-staged T1–2 N0 squamous cell carcinoma of the oral tongue,” written recently by Brennan et al, tried to elucidate the algorithm of elective treatment for CT-staged T1–2N0 oral tongue cancer. This is an important article that provides us with informative prospective data and detailed discussion. However, based on their results, we would like to add some comments to their proposed elective neck dissection and elective radiotherapy (ERT) algorithm.

First of all, the thesis of this well-designed study was based on the hopeful goal that management of the node-negative neck in early-stage oral tongue cancer should be by “single-modality treatment” whenever possible. All the studied patients were dichotomized to either a high-risk group or a low-risk group according to pathological findings of partial glossectomy. The high-risk group patients were defined by primary tongue lesion with 1 or more of the characters including greater than 7 mm muscle invasion, surgical margins less than 5 mm, perineural invasion, and lymphovascular space invasion. The high-risk group patients received ERT (50 Gy) for the neck and adjuvant radiotherapy (60 Gy) for the primary. However, the whole course of treatment for the high-risk group still contains 2 modalities (partial glossectomy and irradiation). In addition, although only surgical treatment was performed for the low-risk group, it was divided into “2 stages” that could cause inconvenience for patients (algorithm 1 of Figure 1). Contrarily, if elective neck dissection was always performed with partial glossectomy and adjuvant radiotherapy was given to risky patients according to overall glossal and cervical pathological findings, the treatment of the low-risk group will still be 1 modality but in only 1 stage (algorithm 2 of Figure 1).

Second, if the aforementioned subclinical nodal disease or occult cervical lymph node metastasis is a major concern of early oral tongue cancer, the pathologic N classification should be an important indicator to guide future management. It has been shown in the article of Nyman et al that N classification had a significant association with survival of oral tongue cancer. Some retrospective reviews by Keski-Säntti et al and Huang et al also support the elective neck dissection for early-stage oral tongue cancer. Furthermore, in the article of Myers et al, they found extracapsular spread to be the most significant predictor of both regional recurrence and
development of distant metastasis. Therefore, in patients with extracapsular spread, intensive regional and “systemic” adjuvant therapy may be indicated. In other words, pathological information obtained from elective neck dissection could give us an indication of not only adjuvant radiotherapy but also adjuvant chemotherapy. In the article of Brennan et al, 4 2o f1 8p a t i e n t s (11.1%) of the ERT arm developed contralateral neck or distant metastasis. This makes us consider the possible importance of adjuvant chemotherapy in addition to radiotherapy.

The patients receiving elective neck dissection for N0 neck had a lower regional nodal recurrence rate compared to patients receiving ERT or those being observed. A recent prospective study by Yuen et al9 suggests observation may be an acceptable alternative to elective neck dissection if strict adherence to cancer surveillance protocol is followed. But in that study, patients in the observation arm had 37.1% (13 of 35) nodal recurrence that was much higher than 5.6% (2 of 36) nodal recurrence in the elective neck dissection arm. Similarly, in Brennan et al’s study, 4 patients in the ERT arm had 16.7% (3 of 18) ipsilateral nodal recurrence that was higher than 0% (0 of 6) nodal recurrence in the elective neck dissection arm. Recurrence needs further treatment and certainly will induce psycho-emotional stress on the patients.

Finally, while choosing the strategy of treating N0 neck, treatment complications should be taken into consideration. Since selective neck dissection has been widely used for prophylactic purposes and the vital organs of the neck were all preserved, complications should be minimal if surgeons always carefully execute the dissection. Contrarily, not to mention some short-term side effects of radiotherapy, there are still many troublesome long-term complications of radiotherapy such as xerostomia.10 In fact, 39% of patients (7 of 18) with xerostomia were reported in Brennan et al’s study.4

In conclusion, although Brennan et al’s study4 was closed due to early meeting of stopping criteria, it still carries an important message. Considering every aspect of the pros and cons of elective neck dissection and ERT, we believe elective neck dissection is more effective than ERT in treating N0 neck in early oral tongue cancer. Therefore, we suggest elective neck dissection be performed in combination with partial glossectomy as shown in algorithm 2 of Figure 1. However, more prospective studies on elective neck dissection are necessary, and results comparing to patients who refuse or cannot receive neck surgery will provide us with a valuable clinical reference.

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REFERENCES

Reply

We would like to thank the authors for their comments. We started this study\(^1\) with the purpose of reducing unnecessary treatment in early oral tongue cancer. However, it is clear that the real issue is the high locoregional failure rates in early CT-staged oral tongue cancer. We agree that a new algorithm is required and are currently developing one that incorporates wider surgical margins, increased use of neck dissection, and the addition of radiotherapy or chemoradiotherapy in selected cases of early oral tongue cancer. The algorithm suggested by Hsu et al is useful but is not detailed in terms of pathological risk factors. It is important to use pathological and molecular markers in order to select those patients who require more aggressive treatment, and avoid toxicity in those who do not.

It is also important to emphasize that the 2 groups in our study are not directly comparable. Hsu et al have compared recurrence rates and toxicity of our 2 groups. However, this is incorrect as the elective radiotherapy group patients had pathological risk factors such as margins <5 mm, depth of invasion >7 mm, and perineural or lymphovascular space invasion, whereas the elective surgical group had no such risk factors. Additionally, it is incorrect to compare the groups in terms of toxicity, as the elective neck radiotherapy group also received adjuvant radiotherapy to the primary site, and it is this which is responsible for the xerostomia in this patient group rather than the neck treatment.

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