#### G Model ANL-2296; No. of Pages 6

## **ARTICLE IN PRESS**

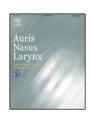
Auris Nasus Larynx xxx (2017) xxx-xxx

ELSEWIED

Contents lists available at ScienceDirect

### Auris Nasus Larynx

journal homepage: www.elsevier.com/locate/anl



# Squamous cell carcinoma of the retromolar trigone: Treatment outcomes

Hideaki Nishi <sup>a,b,\*</sup>, Takeshi Shinozaki <sup>b</sup>, Toshifumi Tomioka <sup>b</sup>, Takashi Maruo <sup>b</sup>, Ryuichi Hayashi <sup>b</sup>

#### ARTICLE INFO

Article history:
Received 27 August 2016
Accepted 11 May 2017
Available online xxx

Keywords:
Retromolar trigone
Squamous cell carcinoma
Retrospective analysis
Marginal mandibulectomy
Segmental mandibulectomy

#### ABSTRACT

*Objective:* Squamous cell carcinoma (SCC) of the retromolar trigone is uncommon, accounting for 1.4% of all oral cancer cases in Japan. Few studies have examined the optimal treatment for this cancer. The aim of this study was to evaluate the outcome of treatment for primary SCC of the retromolar area.

*Methods:* We retrospectively analyzed the outcome and prognosis of 45 patients (38 men, 7 women) with SCC of the retromolar trigone who underwent treatment in our department between July 1992 and March 2011.

Results: Mean age was 62.4 years. Clinical stages were: stage I (n = 4, 8.9%); stage II (n = 10, 22.2%); stage III (n = 5, 11.1%); and stage IVa (n = 26, 57.8%). Surgical resection was performed in all patients and 6 patients also received postoperative radiotherapy. Reconstructive surgery using free flaps was performed in 38 patients; postoperative complications occurred in 5 of these patients. The 3-year local control rate was 80%, and the 3-year over all survival rates for stage I, II, III, and IV disease were 100%, 80%, 40%, and 49.2%, respectively. Cause of death was the original disease in 23 cases and other diseases in 2 cases. The most common cause of death from the original disease was cervical lymph node metastasis.

Conclusion: The presence of cervical lymph node metastasis was a negative prognostic factor. Marginal mandibulectomy may be selected for patients without distinct bone-marrow infiltration.

© 2017 Elsevier B.V. All rights reserved.

#### 1. Introduction

The retromolar trigone is a triangular region of soft tissue immediately posterior to the last mandibular molar teeth and is classified as buccal mucosa based on its anatomical position. Retromolar trigone cancer is a relatively rare cancer in Japan, where it accounts for only 1.4% of oral cavity cancers [1]. Because squamous cell carcinoma of the retromolar trigone results in bone infiltration, lymph node

metastasis and infiltration to the infratemporal fossa in the early stage, its prognosis is poorer than that of squamous cell carcinoma in neighboring areas, such as the tonsils, oral floor and gums [2–4]. However, few reports have addressed the long-term treatment outcomes of retromolar trigone cancer in Japan.

We undertook a study of patients with retromolar trigone squamous cell carcinoma who had undergone initial treatment at the National Cancer Center Hospital East.

http://dx.doi.org/10.1016/j.anl.2017.05.011

0385-8146/© 2017 Elsevier B.V. All rights reserved.

Please cite this article in press as: Nishi H, et al. Squamous cell carcinoma of the retromolar trigone: Treatment outcomes. Auris Nasus Larynx (2017), http://dx.doi.org/10.1016/j.anl.2017.05.011

<sup>&</sup>lt;sup>a</sup> Department of Otolaryngology, Sasebo City General Hospital, 9-3 Hirasemachi, Sasebo, Nagasaki, 857-8511, Japan

<sup>&</sup>lt;sup>b</sup> Department of Head and Neck Surgery, National Cancer Center Hospital East, 6-5-1 Kashiwanoha, Kashiwa, Chiba, 277-8577, Japan

<sup>\*</sup> Corresponding author. Fax: +81 956 22 4641 E-mail address: hnishi@hospital.sasebo.nagasaki.jp (H. Nishi).

## ARTICLE IN PRESS

H. Nishi et al./Auris Nasus Larynx xxx (2017) xxx-xxx

#### 2. Subjects and methods

The subjects were 45 patients with retromolar trigone squamous cell carcinoma treated surgically at the National Cancer Center Hospital East Department of Head and Neck Surgery between July 1992 and March 2011.

The gender distribution was 38 males and 7 females, and the mean age at the time of treatment was 62.4 years (range: 43–89 years). The mean observation period was 52.4 months (range: 2–197 months).

As the primary treatment, surgery was performed on all 45 patients. The postoperative treatment was radiotherapy (RT) (3 patients) or chemo-radiotherapy (CRT) (3 patients). The survival rate was calculated using the Kaplan–Meier method, and the difference in survival was analyzed using the log-rank test. Clinical information was obtained from the patients' medical records. Consent was obtained from the patients according to our institution's policy of obtaining comprehensive consent upon the initial visit. We obtained approval for this retrospective study from the Institutional Review Board of our institution.

#### 3. Results

#### 3.1. TNM classification

The clinical stages are shown in Table 1. Stages III and IV patients together account for 68.9% of the total.

#### 3.2. Details of the surgical procedure

#### 3.2.1. Mandibulectomy

Mandibulectomy was performed on 38 of the 45 patients. Eleven patients underwent marginal resection and 27 patients underwent segmental resection. Marginal mandibulectomy is performed in cases with no evidence of tumor extension beyond the mandibular canal in imaging studies and when the preservation of bone with sufficient thickness is possible. Among the T1 and T2 cases (n = 21), 8 (38.1%) underwent marginal resection and 7 (33.3%) underwent segmental resection; in contrast, among the T3 and T4 cases (n = 24), 3 (14.3%) underwent marginal resection and 20 (83.3%) underwent segmental resection (Table 2).

In the 27 patients who underwent segmental mandibulectomy, the range of resection, excluding the coronoid process, was up to the affected first molar in 11 patients, up to the affected first premolar in 11 patients, and up to the joint process

**Table 1**Distribution of T and N classification (7th edition of the International Union Against Cancer).

| N classification | T classification |    |    |    | Total no. of patients |
|------------------|------------------|----|----|----|-----------------------|
|                  | T1               | T2 | Т3 | T4 |                       |
| N0               | 4                | 10 | 3  | 6  | 23                    |
| N1               | 0                | 1  | 2  | 5  | 8                     |
| N2               | 1                | 5  | 2  | 6  | 14                    |
| N3               | 0                | 0  | 0  | 0  | 0                     |
| Total            | 5                | 16 | 7  | 17 | 45                    |

**Table 2**Primary treatment: surgical procedure by T classification.

| T1 | Partial resection        | 2  |
|----|--------------------------|----|
|    | Marginal mandibulectomy  | 3  |
| T2 | Partial resection        | 4  |
|    | Marginal mandibulectomy  | 5  |
|    | Segmental mandibulectomy | 7  |
| T3 | Partial resection        | 1  |
|    | Marginal mandibulectomy  | 3  |
|    | Segmental mandibulectomy | 3  |
| T4 | Segmental mandibulectomy | 17 |

in 5 patients. Notably, the range of resection in all these patients was similar to that of hemimandibulectomy.

#### 3.2.2. Neck dissection

Among the 45 patients, neck dissection was performed on 39 patients (86.7%). The ranges of neck dissection are shown in Table 3. There were no cases in which neck dissection of the healthy side was carried out.

#### 3.2.3. Reconstructive surgery

Among the 45 patients, reconstructive surgery using free tissue was performed on 38 patients (84.4%). Primary closure was possible in the remaining 7 patients (15.6%). Table 4 shows the reconstructive procedure by the type of resection.

Reconstructive surgery was performed in cases where the mucosal defect was too large to be closed by primary suture. With regard to the patients who underwent segmental mandibulectomy, mandibular reconstruction was performed in patients in whom resection had been performed up to near the mandibular midline, including the mandibular condyle. At our institution, the first choice of reconstruction material is the fibula flap [5]. However, in elderly patients who are likely to sustain postoperative gait disturbance, we consider collecting flaps from other positions, such as from the scapula. Reconstruction using a titanium plate is performed for patients who need mandibular reconstruction but are in poor systemic condition. In our present study, no patient used a titanium plate.

All the patients were able to perform oral ingestion, except the one who died of postoperative complications. Fig. 1 shows the days elapsed from surgery to the start of oral intake in 37 patients who were capable of oral intake. Most of the patients started oral intake 8–14 days after surgery. All of the patients who had undergone marginal mandibulectomy without bone resection started oral intake within 14 days after surgery. Two patients required more than 22 days before being able to start oral intake, a delay that was due to sequestration of the mandibular condyle in one case and surgical wound infection and fistula formation in the other. Final food texture could be

**Table 3**Range of neck dissection

| Range of neek dissection. |             |    |
|---------------------------|-------------|----|
| Affected side             | Level I-IV  | 10 |
|                           | Level I-V   | 2  |
|                           | Level I-III | 27 |

Please cite this article in press as: Nishi H, et al. Squamous cell carcinoma of the retromolar trigone: Treatment outcomes. Auris Nasus Larynx (2017), http://dx.doi.org/10.1016/j.anl.2017.05.011

#### Download English Version:

## https://daneshyari.com/en/article/8754817

Download Persian Version:

https://daneshyari.com/article/8754817

<u>Daneshyari.com</u>