EDITORIAL

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Is elective neck dissection needed in clinically N0 neck in maxillary cancer?

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Maxillary cancer can be classified according to its primary site. In the literature, many authors divide maxillary cancer into carcinomas of the oral mucosa (gingiva, alveolus and hard palate), and carcinomas of the maxillary sinus and nasal cavity malignancies[1-4]. The incidence of neck node metastasis was reported to be 3% to 26% and 12% to 29% in the maxillary sinus and oral mucosa, respectively[1,4-11]. Recent studies have demonstrated that the incidence of regional metastasis of squamous cell carcinoma (SCC) of the upper gingiva, alveolus and hard palate is similar to that of the tongue and mouth floor[5-8].

The traditional management of clinically N0 neck in maxillary cancer has been to wait and see, and this strategy has been widely accepted. Elective neck dissection in clinically N0 neck in maxillary cancer remains controversial. There have been no prospective studies on this topic because of the rarity of maxillary cancer. It is widely accepted that neck dissection is the best course of treatment for maxillary cancer if the possibility of neck metastasis is greater than 15% to 20%[12-14].

In SCC of the hard palate, maxillary gingiva and alveolus, Montes and Schmidt[6] demonstrated a 27% regional failure rate in clinically N0 neck after primary resection. Simental et al.[5] reported the occult metastasis rate of SCC to be 29% in the maxillary gingiva, alveolus, and hard palate. Yorozu et al.[8] found the occult metastasis rate of SCC in the hard palate to be 21%.

In patients with maxillary sinus cancer, Kim et al.[15] reported 13.5% occult metastasis in those who did not receive elective neck dissection at the time of primary resection. Le et al.[4] described a 5-year nodal relapse rate of 20% in N0 neck of maxillary sinus carcinoma without elective neck control at the time of or after surgery, while this rate was reduced to 0% with elective neck irradiation after surgery.

Many studies have reported that occult metastasis of cancers of the oral mucosa of the maxilla is more common than it is in cancers of the maxillary sinus. However, there have been no randomized prospective studies regarding occult metastasis of these cancers.

Traditionally, elective neck dissection of clinically N0 neck is delayed after primary resection of maxillary cancer. Recently, many authors have agreed that regional metastasis of maxillary cancer is aggressive and comparable to cancers of tongue and mouth floor[1,5-7]. Consequently, they recommend elective neck dissection at the time of primary tumor resection. Simental et al.[5] noted that maxillary cancer of the hard palate and alveolus behave like lower gingival cancer, not like sinonasal cancer, and drained level I, II, and III. Also, the rate of occult metastasis of maxillary oral mucosa cancer is very high, and most recent reports have recommended elective neck dissection in N0 neck[2,3,5,7,8,10,12,13]. Salvage surgery may be unsuccessful in cases of regional failure after primary resection.

Elective neck dissection is highly recommended in cancers of the maxillary gingiva, alveolus, and hard palate for regional control. Elective neck dissection is also recommended in cases of locally-advanced maxillary sinus cancer. For regional control, many authors suggest that elective neck dissection is better than radiation therapy, because salvage surgery after radiation therapy can be very difficult[2,3,5,7,12-14].

Conflict of Interest

No potential conflict of interest relevant to this article was reported.

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