

ARTICULATION FUNCTIONS OF THE GLOSSECTOMIZED

M. Sawashima, T. Ushijima,* Y. Kurauchi* and S. Iwamura*

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A cineradiographic study was made on three glossectomized cases with special attention to articulatory functions. In one case, a subtotal glossectomy had been performed, 17 months before the observation, for carcinoma of the tongue reserving only the base of the tongue, while in the other two, a total glossectomy had been combined with a hemimandibulectomy and a radical neck dissection 3 and 7 months before the examination, respectively.

A listening test of the pronunciations of Japanese monosyllables and sound-spectrographic analyses of the five Japanese vowels were made for evaluation of postoperative articulatory functions.

It was found that glossectomized patients had developed compensatory articulations especially for those sounds that would have been pronounced by the tip of the tongue. These were substituted mainly by the sounds articulated between the upper teeth and the lower lip.

Through the experience of these cases, the authors feel that the extent of the surgical removal of the lingual tissues is the determining factor for the postoperative speech ability. If the base of the tongue is reserved and movable, the articulation is still feasible. If the entire part of the tongue is removed, a compensatory use of the lower jaw, the teeth and the lip is necessary for developing intelligible speech. In the course of postoperative rehabilitation, exercise of facial and cervical muscles should be encouraged in order to promote compensatory articulations. The first step of rehabilitation is that the patient be encouraged to eat through his mouth.

* Department of Otorhinolaryngology, Faculty of Medicine, University of Tokyo.