

Diagnosis and Surgical Treatment of Microlesions of the Vocal Fold in Professional Voice Users

Eiji Yumoto, M.D.

Department of Otolaryngology - Head and Neck Surgery
School of Medicine, Kumamoto University, Japan

The term "Professional voice user" refers to not only a singer or actor, but also anyone who uses the voice as a primary means of occupational communication. Examination begins with observation of a patient and careful listening of the patient's voice during history taking. Examination of the vocal fold includes observation of the vocal fold, its mobility and vibration. We prefer to use an oblique-view rigid endoscope coupled with a CCD camera for recording the vocal fold vibration, although flexible fiberoptic is often used to observe the vocal fold during articulation. Aerodynamic studies are also performed. Nodules, polyp and inflammation are the most popular lesions. Nodules are defined as small benign swelling along the margin of the vocal folds. They are typically found at the junction of the anterior one third and posterior two thirds. Polyp is defined as sessile or pedunculated benign mass of the vocal fold. It is classified into three types: a glassy translucent gelatinous form, a telangiectatic type, and a transitional form. Voice therapy is the choice of nodules, while surgical resection is the primary treatment of polyp. Vocal fold lesions in professional voice users are usually tiny and sometimes impossible to label them as we commonly do like nodules or polyp. We very often encounter the borderline lesions. In addition, different kinds of lesions may exist on the vocal fold. Decision making for proceeding operation or not depends upon meticulous assessment of vocal fold vibration, degree of dysphonia and need for vocal usage. We operate on a patient under general anesthesia with endotracheal intubation because a very well-stabilized operative field is required for a precise and minimal manipulation. Again, careful examination of the vocal fold including its lower surface must be done before actual surgical resection. Precise excision of the lesion is mandatory to save the mucosa as much as possible. Further, pre- and postoperative voice therapy is important. Recently, we have surgically treated 14 professional voice users. Two had typical nodules, two

had nodules reactive to polyp on the other side, and 10 had atypical lesions. Videostroboscopy before and after operation and operative view will be presented