ABSTRACT

Laryngeal microsurgery (LMS) with CO2 laser has frequently been a therapeutic option for small tumors (T1, T2) and a palliative option for large tumors (T3, T4). Wide exposure of the anterior commissure was desirable because the anterior commissure is considered a hallmark of glottic malignancy. We evaluated the feasibility of the Nd-YAG laser for laryngeal lesions from dysplasia to T3. While exposure difficulty was encountered during the operation or suspected before the surgery, after written permit of informed consent was obtained, flexible Nd-YAG laser under telescopy control was performed. Although accompanied with neck compression maneuver, 11 patients encountered inadequate exposure for CO2 laser LMS. Nd-YAG laser was performed for 11 (6 R, 5 L). The voice function were good without chocking or insidious aspiration in 82%.

RESULTS

Most glottic tumors arise at the free margin or rima glottidus, in the anterior cord, where lymphatics are sparse. So there is usually excellent local control of the primary cancer. Because the anterior commissure is not easily accessible endoscopically, the anterior commissure lesions are often understaged. Involvement of the thyroid cartilage is often missed or misjudged. A true T4 lesion may be treated as T2 with consequently poor results. The exposure may be inadequate due to some limitations, including that vision after reflexes, patients with short neck, prominent incisors, short epiglottis, TM joint limitation, micronathia and prominent tongue, etc. To improve the exposure, it is easy to think of the flexible laser optical fiber, which may be maneuvered, adjusted to Y-joint, microphonic and prominent tongue, etc. To improve the exposure, it is easy to think of the flexible fiber laser optical fiber, which may be maneuvered, adjusted to Y joint, microphonic and prominent tongue, etc. To improve the exposure, it is easy to think of the flexible laser optical fiber, which may be maneuvered, adjusted to Y joint, microphonic and prominent tongue, etc.

DISCUSSION

Because the anterior commissure is not easily accessible endoscopically, the anterior commissure lesions are often understaged. Involvement of the thyroid cartilage is often missed or misjudged. A true T4 lesion may be treated as T2 with consequently poor results. To avoid such miserable result, during this contact Nd-YAG laser surgery, we use every effort not to cause thermal damage but also ensure sufficient exposure for the tumor. On the contrary, we use laser for palliation of the supra-glottic and subglottic region delicately and precisely.

CONCLUSIONS

With proper patient selection and stamping technique, this telescopy guided Nd-YAG laser surgery could improve exposure and help to perform the laser excision in some difficult situations.

REFERENCES


