

## **THE THERAPEUTIC APPROACH OF THE VOCAL CORD PALSY AFTER THYROIDECTOMY USING THYROIDECTOMY-RELATED VOICE QUESTIONNAIRE (TVQ)**

Chun, Byung-joon<sup>1</sup>; Sun, Dong-il<sup>1</sup>

<sup>1</sup>Department of Otolaryngology-Head and Neck Surgery, College of Medicine, The Catholic University of Korea, Seoul, Korea, Republic of

**Background/Purpose:** The objective of this study is to investigate the clinical usefulness of thyroidectomy-related voice questionnaire (TVQ) for the decision of the treatment modality of vocal cord palsy after thyroidectomy.

**Methods:** The study group consisted of 48 consecutive patients diagnosed with unilateral vocal cord palsy (UVCP) after thyroidectomy between June 2009 and May 2011. All patients underwent laryngeal examination and voice analysis, and all completed the thyroidectomy-related voice questionnaire (TVQ) pre- and 2 weeks post-thyroidectomy, and at 1, 3, 6 and 12 months following the procedure. If the patients had more severe symptom (total TVQ  $\geq 40$ ), these patients were more likely to receive injection laryngoplasty. If the patients had relative mild symptom (total TVQ  $< 40$ ), these patients were received voice therapy. As a result, 25 patients underwent temporary injection laryngoplasty and 23 patients underwent voice therapy.

**Results:** Subjective parameters and objective parameters were significantly improved at 1 month post treatment and continued to improve slowly over 12 months ( $p < 0.01$ ), in both the injection laryngoplasty group and voice therapy group. Reductions of the total TVQ were significantly higher in the injection laryngoplasty group compared with the voice therapy group at 1 month post-intervention ( $p < 0.01$ ). At 6 months after treatment, the objective parameters were nearly normalized to preoperative levels; however, most of the patients had abnormal subjective symptoms 12 months after thyroidectomy.

**Discussion & Conclusion:** TVQ can be helpful to decide the treatment modality than objective parameter in postoperative vocal cord palsy patients. Moreover, Early management following early diagnosis of post-thyroidectomy UVCP can improve the patients' quality of life.