ABSTRACT

Objective
Providing good vocal outcomes to vocal fold cancer patients, after open or endoscopic surgery, is a hot topic; several authors proposed different phonosurgical techniques focusing their attention on feasibility. Aim of our study was to evaluate objective and subjective vocal outcomes after Montgomery Thyroplasty.

Methods
During 2011, at the I ENT Division of Turin University, 8 patients underwent Montgomery thyroplasty followed by 6 months of speech rehabilitation. Thirty-one cancer patients were observed at the University of Turin, 3 - 10126 Turin, Italy and 9-10126 Turin, Italy.

Results
After six months from the surgical procedure, the laryngostroboscopy showed a remarkable glottic closure during phonation even if irregular and asymmetric. Perceptual and postoperative MDVP parameters were compared by means of T Student Test, observing a statistically significant improvement of all parameters (p<0.05). The most relevant improvements were observed in:
- Shimmer (2.1dB vs 0.82 dB), Amplitude (413 ± 510 vs 220 ± 342), Average Fundamental Frequency (192Hz ± 28 vs 148 ± 23Hz), Perturbation Quotient (17.6 % vs 6.1%), Absolute Jitter (645 μs vs 39 μs), Degree of Jitter (2.01 vs 0.41), Degree of V. Jitter (3.06 vs 0.59), Degree of V. Absolute Jitter (6.1% vs 1.2%).

Conclusion
Our data suggest that Montgomery Thyroplasty, associated to speech rehabilitation, is an efficient and well tolerated rehabilitative approach in order to improve vocal concerns of vocal fold cancer patients treated with open or endoscopic laryngeal procedures.

REFERENCES