

Autologous fat injection laryngoplasty: Our experience 44 patients with unilateral vocal cord paralysis

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Abstract

Objectives: The aim of the study was to evaluate the results of autologous fat injection laryngoplasty in the treatment of unilateral vocal cord paralysis.

Methods: A retrospective study was performed from 15th Nov 2017 to 15th Feb 2021 in First Central Hospital of Mongolia. Acoustic analysis was performed EGG and on a long-term average spectrum of text and on the Praat, evaluation of the vowel /a/. Liposuctioned lower abdomen fat was injected for augmentation of paralyzed vocal cord in 44 patients with unilateral vocal cord paralysis. The data analyzed included patient characteristics and type of intervention, along with the pretreatment and post-treatment parameters of electroglottography, videostroboscopy, GRBAS (Grade, Roughness, Breathiness, Asthenia, Strain) scale, and VHI (Voice Handicap Index).

Results: Our study involved 44 patients with UVCP their ages ranged from 29 to 67 years, with a mean of 48.1. The most common cause of unilateral vocal cord paralysis was thyroid surgery (66%). All patients showed a substantial improvement in vocal parameters after treatment. Electroglottography (MPT, Jitter, Shimmer and Fundamental frequency), Videostroboscopy (Glottal closure, Amplitude, Mucosal wave, Regularity) improved significantly ($P < 0.05$) compared before surgery. Post-injection voice improvement was assessed statistically ($P < 0.05$) compared to the pre-injection assessment of the voice of patients with unilateral paralysis by the GRBAS and VHI criteria.

Conclusion: Autologous fat Injection laryngoplasty is simple, safe and effective treatment for patients with unilateral vocal cord paralysis

Biography

Nergui.S has completed her Master's degree at the age of 30 years from Mongolian National University Medical Sciences and doctoral

studies from Mongolian National University Medical Sciences. She has done many things for laryngology section of Mongolia.