

The Longterm Outcome of Intracordal Auricular Cartilage Injection for Unilateral Vocal Fold Paralysis

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Objective

In previous study about the histomorphologic changes of injected cartilage at two and three years after intracordal autologous cartilage injection, we reported that the histologic presence of cartilage was preserved. On the basis of these findings, we evaluated the efficacy and outcome of intracordal auricular cartilage injection in patients with unilateral vocal fold paralysis.

Methods

Thirty patients with breathy dysphonia caused by unilateral vocal fold paralysis underwent intracordal auricular cartilage injection from Jan, 2002 to Dec, 2009. Each subject underwent

preoperative and postoperative acoustical voice analysis, subjective voice assessments, and videostroboscopy.

Results

Acoustic parameters of jitter, shimmer, noise-to-harmonic ratio, and maximum phonation time improved significantly at 6 and 12 months after cartilage injection ($p < 0.05$). No complication was observed after injection.

Conclusion

Initial results with intracordal cartilage injection are promising. Autologous auricular cartilage may be a safe, effective, and alternative material for vocal fold augmentation.