

# 성대주입에 의한 성대수술

- 수술수기 및 주입물질을 중심으로 -

김 성 수 · 최 홍 식

## Phonosurgical Vocal Fold Injection

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### - ABSTRACT -

Glottal incompetence is one of the causative condition of hoarseness. There have been various methods to improve the glottal conditions. Vocal fold augmentation by injection under direct visual control is a quick and simple operation. Various vocal fold augmentation procedures have developed in recent years. Phonosurgical vocal fold injection can be classified as superficial or deep, by the location of the injection. The choice of material for vocal fold injection is critical and should be determined by the injection location, technique, and the pathologic condition. There are multiple approaches or methods for vocal fold injection ; the most widely used are presented in detail in this article. (**J Clinical Otolaryngol 2001;12:162-168**)

**KEY WORDS** : Glottal incompetence · Vocal fold injection.

### 서 론

(Fig. 2).

가

가 , 가

술전검사

(Fig. 1)

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146 - 92

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### 성대내 주입의 위치

가 가 (Fig. 2).

(Fig. 3).

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### 성대내주입 물질의 종류

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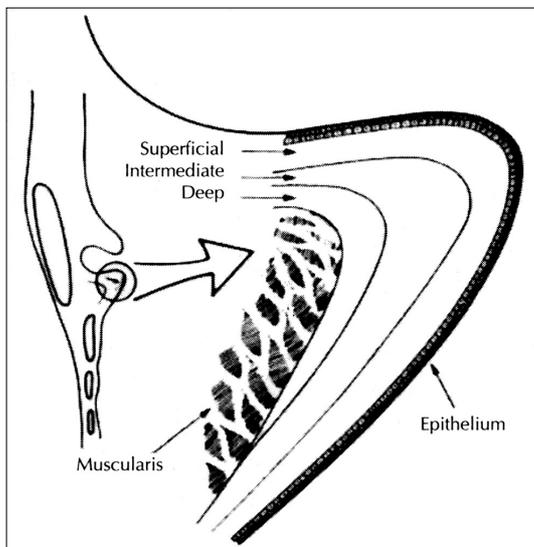


Fig. 1. Schematic drawing of lamina propria showing superficial, intermediate, and deep layers.

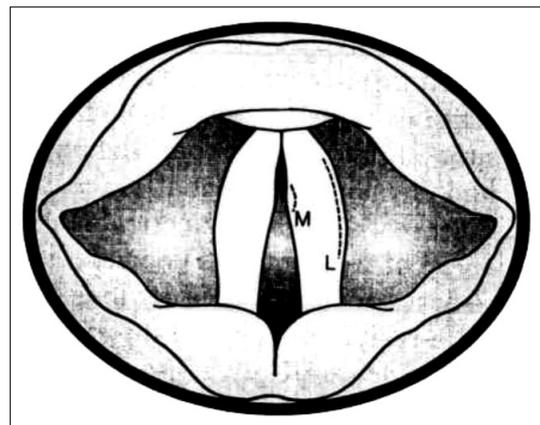


Fig. 2. Diagram showing the fundamental difference between the lateral (L) and medial (M) microflap. The medial flap is limited by the approximate dimensions of the lesion.



성대주입의 술기

가 :  
 가 :  
 (elastine particle)  
 27 - g  
 needle AlloDerm (18)  
 Dermallogen, cymetra  
 Mark (19)  
 (fibroblast) 30 가  
 5 가  
 90 가 Gray (min -  
 (13) ithyrotomy) (Fig. 4).<sup>20)</sup>  
 가 (14)(15) Rihkanen 가  
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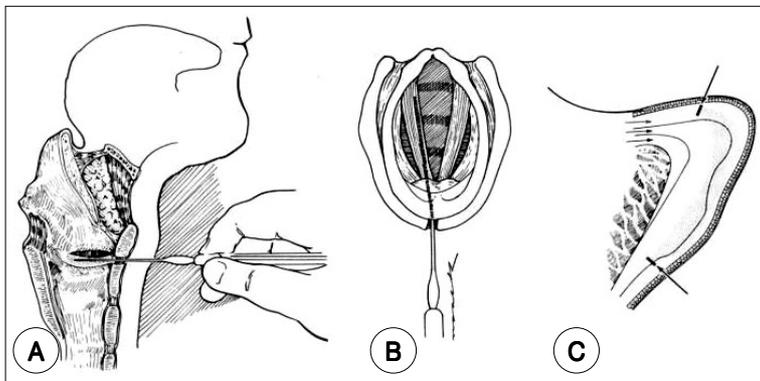
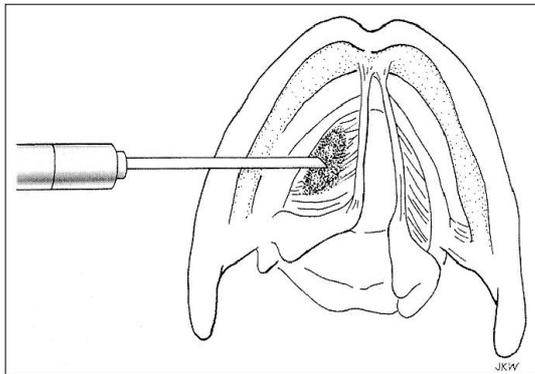
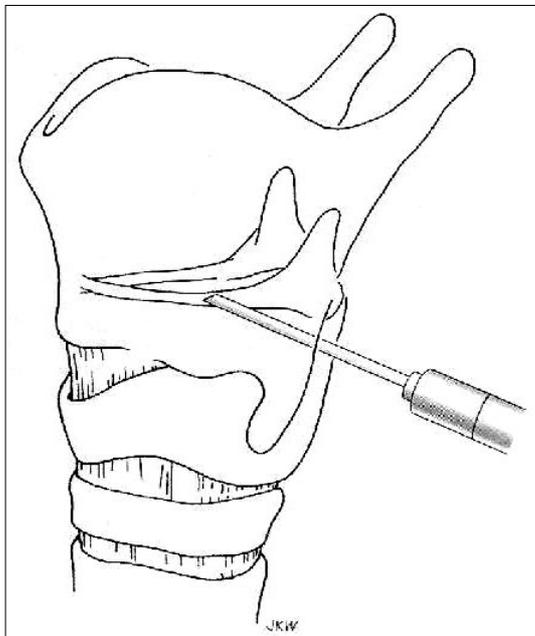


Fig. 4. Three illustrations showing minithyrotomy. A, B : Small bur hole or window is created through thyroid cartilage. Instruments are then placed through this thyroid cartilage. C : Stippled area shows location of pocket created.

(Fig. 5)  
(Fig. 6),  
Anderson <sup>21)</sup>



**Fig. 5.** Trans-thyroid cartilage technique of vocal fold injection. This technique is only suitable in younger patients without calcification of the thyroid cartilage.



**Fig. 6.** Posterior approach to vocal fold injection. The thyroid cartilage is grasped and rotated with one hand, and the needle introduced posterior to the thyroid lamina, then angled anterior and cephalad for injection.

### 내시경적 성대내 주입술

Rosen

<sup>22)</sup>(Fig. 7).

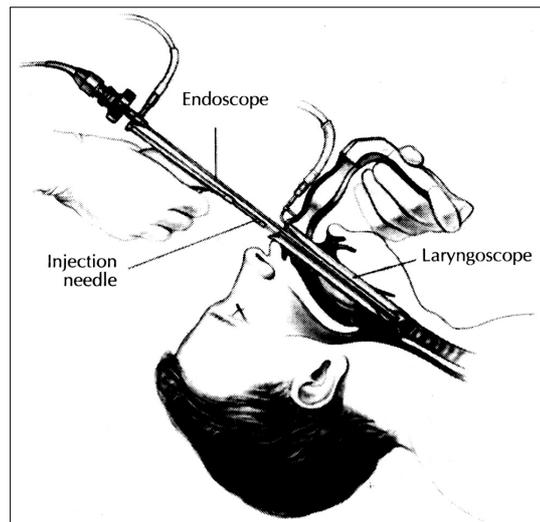
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### 성대내주입술후의 치료

Rogen

6

2



**Fig. 7.** Endoscopic vocal fold injection. Note the laryngoscopy position of neck flexion and head extension.

## 성대내주입술의 합병증

(secondary muscle tension dysphonia)

7 중심 단어 :

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