

후두 외상 (laryngeal trauma)

가 cuff 가

가

5) 24 , 11 5 (posterior glottic scar) 6%

10 3 가 인후두역류증 (laryngopharyngeal reflux disease)

가 가 8)

윤상피열관절염

25%

가 , gout, Tietze , ankylosing spondylitis, Reiter , Crohn , collagen vascular disease 9)

악성종양

(laryngeal papilloma)

(anterior glottic web)

(posterior gl -

(posterior gl -

가

신경학적 손상

Arnold - Chiari , amyotrophic lateral sc - lerosis, 1)

진 단

가 Bernoulli

(stridor) 가 가

(paramedian) (median) 가

가

Table 1. Causes of bilateral vocal cord immobility

I. Central nervous system disease	
A. Transient ischemic attacks	
B. Arnold-Chiari malformation	
C. Hydrocephalus	
D. Meningomyelocele	
E. Syringomyelia	
F. Status post head trauma	
G. Dystonia	
H. Drug-induced dyskinesia	
I. Myoclonus	
J. Parkinson-plus syndrome (multiple-system atrophys, Shy-Drager syndrome, progressive supranuclear palsy)	
II. Neuromuscular disease	
A. Myasthenia gravis	
B. Multiple sclerosis	
C. Amyotrophic lateral sclerosis	
D. Guillain-Barre syndrome	
E. Myopathy	
F. Pseudotetanus (spasmophilia, hyperventilation)	
III. Local	
A. Vocal cord fixation	
1. Arytenoid dislocation	
2. Cricoarytenoid arthritis, synovitis	
3. Tumors	
B. Laryngospasm associated with asthma	
C. Laryngospasm associated with gastroesophageal reflux disease	
D. Laryngospasm caused by inflammation after upper respiratory infection	
E. Trauma	
1. External neck (blunt or sharp)	
2. Intubation	
IV. Peripheral nerve injury	
A. Neoplastic	
1. Neck	
2. Chest	
B. Iatrogenic	
1. Thyroid surgery	
2. Chest surgery	
3. Neck surgery	
C. Idiopathic	
V. Psychogenic	
A. Conversion disorder	
B. Malingerers	
C. Psychogenic + organic neurologic disease	

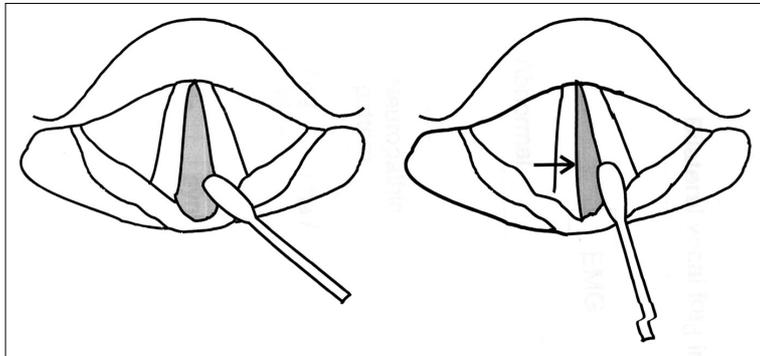


Fig. 1. Assessment of arytenoid mobility and interarytenoid tethering by direct palpation.

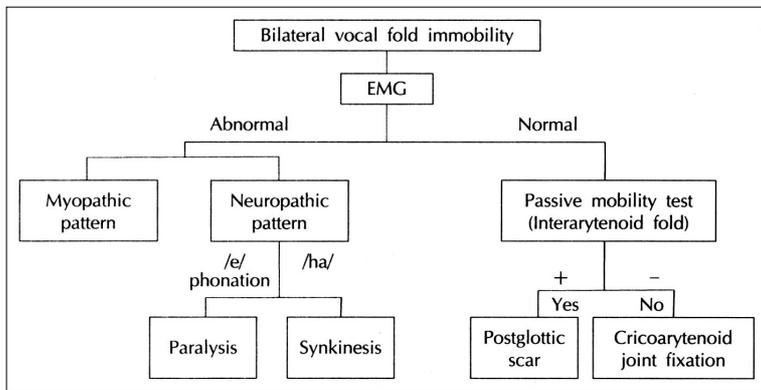


Fig. 2. Diagnostic workup of bilateral vocal fold immobility.

Fig. 2

1)

약물치료

치 료

가

6

가

가

가

가

(posterior glottic scar)

(spasmodic dysphonia)

Botulinum toxin A(Botox)

가

가

가

11)

(reinner-

vation)

laryngeal synkinesis가

가

Botox

(lateral cricoarytenoid muscle)

10)

1)

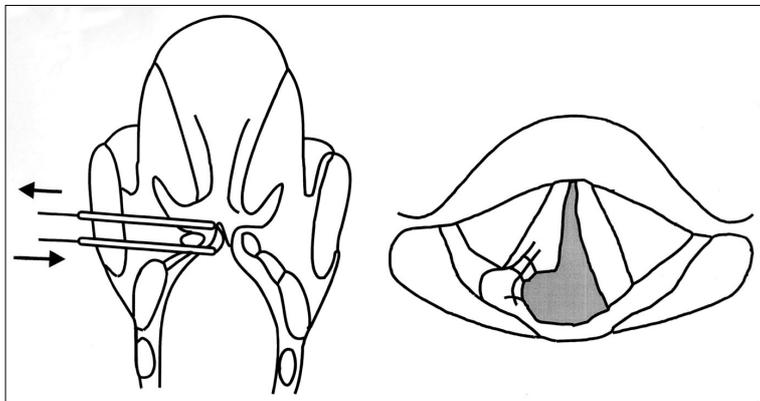


Fig. 4. Submucosal partial arytenoidectomy with stitch lateralization.

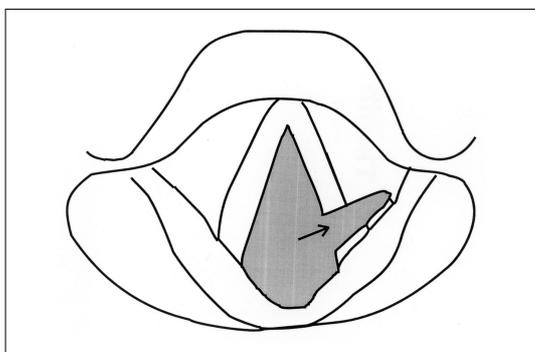


Fig. 5. Posterior cordectomy.

alization

(Fig. 4).

Dennis ²²⁾

(posterior cordectomy)

2/3

(Fig. 5).

. Lichtenberger ²³⁾ endo -
extralaryngeal needle carrier la -
teralization

(submucosal corde -
ctomy) suture lateralization
(submucosal cordectomy
with arytenoidectomy) suture lateralization

²³⁾ Benninger ¹⁰⁾
(cordotomy with
anterolateral arytenoidectomy) . La -
ccourreye ²⁴⁾ (posterior cordo -
tomy) 가
. Segas ²⁵⁾ CO₂ KTP - 532
laser
가
Eckel ²⁶⁾

신경재지배

가
(posterior cricoarytenoid muscle, PCA)
(reinnervation)

가
1976 Tucker²⁷⁾가 (ansa hypo -
glossi)
(omohyoid muscle) 가
가 5

100% 202 lateralization
 74% (phrenic nerve) electrical pacing
 가 Doyle²⁹⁻³¹⁾ Doyle³⁰⁾
 가 12 9
 Crumley³¹⁾
 3
 가
 Electrical pacing
 pacemaker
 가 가
 1996 Zelear³³⁾
 electrical pacing
 Itrel® (Medtr -
 onics Inc.)
 결론
 , syskinesis,
 가
 passive
 mobility test가
 CT, X- 가
 가
 CO₂ laser

중심 단어 :

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