

내시경 수술의 확대적용

이 봉 재 · 남 의 철

Extended Application of Endoscopic Surgery

Bong-Jae Lee, MD and Eui-Cheol Nam, MD

Department of Otolaryngology, Asan Medical Center, University of Ulsan College of Medicine,
Seoul, Korea

서 론

내시경적 누낭비강문합술
(Endoscopic Dacryocystorhinostomy)

10

가

가 -

1900

가

, ,
() ,1989 .¹⁾

- , pump

co - 75 96%

. ²⁻⁴⁾

mputer - assisted technology가

가

수술방법

: , 138 - 736

388 - 1

: (02) 2224 - 3710 · : (02) 489 - 2773

E - mail : bjlee@www.amc.seoul.kr

4% cocaine
hrine4% lidocaine + 1 ; 1000 epinep -
1% lid -

J Clinical Otolaryngol 1999;10:15-21

cocaine + 1 : 100,000 epinephrine

Hertel's exophthalmometer

sickle knife

(mucosal flap)

가 2 mm

17 mm

, bone curet,

septal go -

usage mallet

가

Holmium - YAG

가

가

tenting

가

10

4 8

가

mitomycin - C

⁵⁾

내시경적 안구감압술
(Endoscopic Orbital Decompression)

santral approach)

(tran -

Graves' disease

10 25%

가

2 5%

가

가

가

수술방법⁶⁾ 및 결과

6 24

3

가

가

30 40%

(middle meatal antrostomy)

80%

가

10%

가

가

(infraorbital nerve)

가 . CT - cistern -

ography .

3 1 , , , 가 , , , 90% . 70 80% 가 가 내시경수술을 통한 뇌척수액비루의 치료 Stankiewicz¹⁰⁾ fibrin glue Papay¹¹⁾ Metson⁷⁾ 6 3.2 mm , Shepard Levin⁸⁾ mm 1) , 2) 4.4 mm 40% 4.5 4.9 mm, , 3) 5.7 mm , 4) 가 가 가 (4%), 가 (3%), , (apposition), 가 1 cm 90% 80% 2 . 가 , , , 가 가 가 수술 수기¹²⁾¹³⁾ 가 5 mm , 2 - transferrin

가 , en - bloc resection
 가 , field - tumorization
 tenting 가
 . Fibrin glue micro - fib -
 rillar collagen Gelfoam drilling
 Merocel® 5 7 가
 수술 결과
 20 40%
 76 94.4%⁽¹⁴⁾⁽¹⁵⁾

0 22%
 , 40 78%

비 · 부비동 종양의 내시경 수술
 1992 Kamel ¹⁶⁾
 1) 3
 가 가 , 2) 가 ,
 (full visualization), Waitz Wigand ¹⁷⁾ 35
 3) , 4) 17%, 16 19%
 가 , 5) 가 Brors ¹⁸⁾ 22
 가 , 6) 1
 가 4 (18%)

반전성 유두종의 내시경적 절제 (endoscopic Denker operation) 11
 가 1 (9%)
 1) Lee ¹⁹⁾ Chang ²⁰⁾
 9% 11%
 , 2)
 비인강 혈관섬유종
 , 3) 가
 , 4)
 , 5) , piecemeal di -
 , 6) ssection 가 , 가
 , 7) Session's staging²⁴⁾ I
 IIa[minimal extension into pterygomaxillary fossa

(PMF)] lib ,
 (full occupation of PMF, displacing posterior antral wall or superior extension eroding orbital bone) , , ,
 가 suprasellar extension .
 , 가 ,
 가 Jho ²⁶⁾ 50
 2
 가 가 가
 가 (la - 가 2
 teralization) , 가 6 ,
 sickle knife 가 2 ,
 Cottle elevator Joseph elevator 1 , 1
 Allis forceps
 (bipolar coagulator) 가
 (sphenopalatine fossa) 가
 4 5
 가
 frame
 가 가 .
 . Frame
 뇌하수체 종양의 수술(Endoscopic pituitary tumor surgery) (articulated mechanical arm),
 1992 Jankowski ²⁵⁾ ,
 (tracking probes)
 x - y - z
 3
 30 ° (ra -
 dioopaque fiducial markers)

29)

중심 단어 :

REFERENCES

- 1) McDonogh M, Meiring JH. *Endoscopic transnasal dac-*

- ryocystorhinostomy. *J Laryngol Otol* 1989;103:585-7.
- 2) Metson R. *The endoscopic approach for revision dacryocystorhinostomy*. *Laryngoscope* 1990;100:1344-7.
- 3) Weidenbecher M, Horsemann W, Buhr W. *Endoscopic endonasal dacryocystorhinostomy: Results in 56 patients*. *Ann Otol Rhinol Laryngol* 1994;103:363-7.
- 4) Sprekelsen MB, Barberan MT. *Endoscopic dacryocystorhinostomy: Surgical technique and results*. *Laryngoscope* 1996;106:187-9.
- 5) Ingrmas DR, Volk MS, Biesman BS, Pankratov MM, Shapsshay SM. *Sinus surgery-does mitomycin C reduce stenosis?* *Laryngoscope* 1998;108:883-6.
- 6) Kennedy DW, Goodstein ML, Miller NR. *Endoscopic transnasal orbital decompression*. *Arch Otolaryngol Head Neck Surg* 1990;116:275-82.
- 7) Metson R, Dallow RL, Shore JW. *Endoscopic orbital decompression*. *Laryngoscope* 1994;104:950-7.
- 8) Shepard KG, Levin PS, Terris DJ. *Balanced orbital decompression for Graves' ophthalmopathy*. *Laryngoscope* 1998;108:1648-53.
- 9) Stankiewicz JA. *Complications in endoscopic intranasal ethmoidectomy-an update*. *Laryngoscope* 1989;99:686-90.
- 10) Stankiewicz JA. *Cerebrospinal fluid fistula and endoscopic sinus surgery*. *Laryngoscope* 1991;101:250-6.
- 11) Papay FA, Maggiano H, Dominquez S. *Rigid endoscopic repair of paranasal sinus cerebrospinal fluid fistulas*. *Laryngoscope* 1989;99:1195-201.
- 12) Lee BJ, Kim HS, Cho YG, Kim JH. *Cerebrospinal fluid rhinorrhea: Report of three surgically-treated cases*. *Korean J Otolaryngol* 1996;39:1868-73.
- 13) Mattox DE, Kennedy DW. *Endoscopic management of cerebrospinal fluid leaks and cephaloceles*. *Laryngoscope* 1990;100:857-62.
- 14) Gjuric M, Goede U, Wigand ME. *Endonasal endoscopic cerebrospinal fluid fistulas at the anterior cranial base*. *Ann Otol Rhinol Laryngol* 1996;105:620-3.
- 15) Lanza DC, O'Brien DA, Kennedy DW. *Endoscopic repair of cerebrospinal fluid fistulae and encephaloceles*. *Laryngoscope* 1996;106:1119-25.
- 16) Kamel R. *Conservative endoscopic surgery in inverted papilloma*. *Arch Otolaryngol Head Neck Surg* 1992;118:649-53.
- 17) Waitz G, Wigand ME. *Results of endoscopic surgery for the treatment of inverted papillomas*. *Laryngoscope* 1992;102:917-22.
- 18) Brors D, Draf W. *The treatment of inverted papilloma. Current Opinion in Otolaryngology & Head and Neck Surgery* 1999;7:33-8.
- 19) Lee CH, Lee SJ, Suh SJ, Kang JK. *Treatment of inverted papilloma: Role of conservative surgery using nasal endoscope*. *Korean J Otolaryngol* 1996;39:1151-60.
- 20) Chang Y, Kim JH, Kim YJ, Shin JE, Lee BJ. *Inverted papilloma of the nose and paranasal sinuses: Treatment outcomes of 76 cases*. *J Rhinol* 1998;5:98-102.
- 21) Mitskavich MT, Carrau RL, Snyderman CH, Weissman JL, Fagan JJ. *Intranasal endoscopic excision of a juvenile angiofibroma*. *Auris Nasus Larynx* 1998;25:39-44.
- 22) Tseng HZ, Chao WY. *Transnasal endoscopic approach for*

:

- juvenile nasopharyngeal angiofibroma. Am J Otolaryngol* 1997;18:151-4.
- 23) Kamel RH. *Transnasal endoscopic surgery in juvenile nasopharyngeal angiofibroma. J Laryngol Otol* 1996;110:962-8.
- 24) Sessions RB, Bryan R, Naclerio R, Alford B. *Radiographic staging of juvenile angiofibroma. Head Neck Surg* 1981;3:279-83.
- 25) Janokowski R. *Endoscopic pituitary tumor surgery. Laryngoscope* 1992;102:198-202.
- 26) Jho HD, Carrau RL. *Endoscopic endonasal transsphenoidal surgery: Experience with 50 patients. J Neurosurg* 1997;87:44-51.
- 27) Anon JB, Klimek L, Mosges R, Zinreich SJ. *Computer-assisted endoscopic sinus surgery-an international review. Otolaryngol Clin North Am* 1997;30:389-401.
- 28) Metson R, Gliklich RE, Cosenza M. *A comparison of image guidance systems for sinus surgery. Laryngoscope* 1998;108:1164-70.
- 29) Roth M, Lanza DC, Zinreich J. *Advantages of disadvantages of three-dimensional computed tomography intraoperative localization for functional endoscopic sinus surgery. Laryngoscope* 1995;105:1279-86.