

부비동 점액낭종의 임상양상

동아대학교 의과대학 이비인후과학교실

김동영 · 권병우 · 박동은

Clinical Evaluation of Paranasal Sinus Mucocele

Dong-Young Kim, MD, Byung-Woo Kwon, MD and Dong-Eun Park, MD

Department of Otorhinolaryngology-Head & Neck Surgery, College of Medicine, Dong-A University,
Busan, Korea

-ABSTRACT-

Background and Objectives : A mucocele is an epithelial-lined, mucus-containing sac completely filling a paranasal sinus and capable of expansion by virtue of dynamic process of bone resorption and new bone formation. It is thought to be secondary to obstruction of the main ostium of the sinus. This obstruction may be the result of inflammation, trauma, osteoma, fibrous dysplasia, or repeated surgery in and around the nasal cavity. Mucocele can occur in any sinuses, but the frontoethmoidal region is most commonly affected. We aimed to evaluate clinical features and treatment results of paranasal sinus mucoceles in Dong-A University Hospital. **Patients and Method** : We analyzed 46 cases of paranasal sinus mucocele, including postoperative cheek cyst (POCC), which had been operated in Dong-A University Hospital between November 1990 and November 2002. **Results** : Ethmoid sinus mucocele was most common except POCC. Frontal and ethmoid mucoceles mainly showed ophthalmic symptoms such as exophthalmus, orbital pain, and diplopia, whereas maxillary mucocele mainly showed cheek swelling and nasal obstruction. Endoscopic marsupialization was performed in 20 out of 22 cases except POCC. In most POCCs except 4 cases, endoscopic and Caldwell-Luc approaches were combined. Only 1 out of 46 cases recurred. **Conclusion** : Ethmoid sinus mucocele was most common except POCC, and mainly showed ophthalmic symptoms. Endoscopic marsupialization was performed in 20 out of 22 cases except POCC, and only 1 case recurred. (J Clinical Otolaryngol 2004;15:93-97)

KEY WORDS : Paranasal sinuses · Mucocele · Endoscopy.

서 론

(mucocele)

.1) 1819 Langenbeck

1896 Rollet
1-3)

: 2004 4 10

: 2004 5 27

: 602-715

3가 1

(fibrous dysplasia),

(osteoma)

동아대학교 의과대학 이비인후과학교실

: (051) 240-5428 · : (051) 253-0712

E-mail : kimdy@daunet.donga.ac.kr

1)4)

genase)가 E2(PGE2) (collagenase)가
 1)
 1)3)
 가 1)4)5)
 (marsupialization) , 1)2)6)
 12
 (postoperative cheek cyst, POCC)
 46

대상 및 방법

1990 11 2002 11
 46 , ,
 24 , 22 ,
 13 78 51.8
 3 60 15.3
 (patency)
 가 20 ,
 가 26 . 24 Caldwell - Luc
 , 2
 1

결 과

이환된 부비동별 분포

46 27 , 13 , - 3 ,
 2 , 1
 27 24 가 Caldwell - Luc
 (Table 1).

임상 증상

가
 18 , 15 , 12 , 7 , (di-
 plopia) 3 , (orbital pain) 2
 18
 (Table 2).

술 전 방사선 소견

46
 가 , 18 ,

Table 1. Distribution of involved sinus (n=46)

| Sinus | N |
|---------------|-----|
| Maxillary | 27* |
| Ethmoid | 13 |
| Frontoethmoid | 3 |
| Sphenoid | 2 |
| Frontal | 1 |

* : Postoperative cheek cyst(POCC) : 24 cases

Table 2. Clinical symptoms of mucocele

| Symptom | N* |
|----------------------|-----|
| Cheek swelling, pain | 18† |
| Nasal obstruction | 15 |
| Headache | 12 |
| Exophthalmus | 7 |
| Diplopia | 3 |
| Orbital pain | 2 |
| Eyelid swelling | 1 |

* : Numbers are not mutually exclusive

† : POCC : 18 cases

Table 3. Operation procedure for mucocele (n=46)

| | |
|--|-----|
| Endoscopic marsupialization | 24 |
| Caldwell-Luc and endoscopic approaches | 21* |
| External and internal ethmoidectomy | 1 |

* : POCC : 20 cases

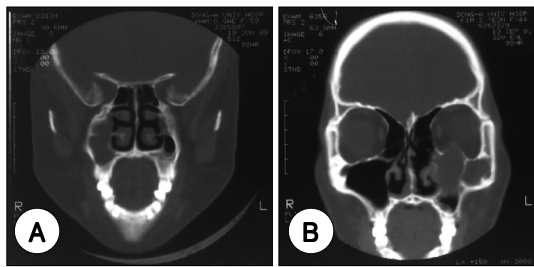


Fig. 1. Preoperative coronal PNS CT scans of postoperative cheek cyst. A : It shows an unilocular cystic lesion in the right maxillary sinus. B : It shows a septated cystic lesion with the inferior orbital wall destruction in the left maxillary sinus.

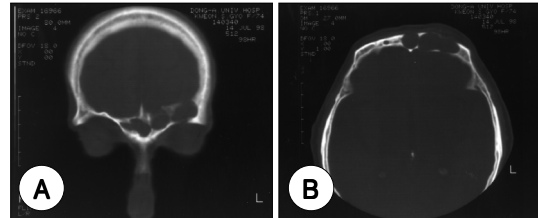


Fig. 2. PNS CT scans of recurrent frontal sinus mucocele after endoscopic marsupialization. They show a septated cystic lesion in the frontal sinus. A : coronal scan. B : axial scan.

술 후 합병증

(oroantral fistula) 1 가 2 , 1 ,

(trephination) (abdominal fat obliteration) (Fig. 2).

수술 방법

46 24 , 4 21 Caldwell - Luc , 20 , 1 . 1 (Table 3).

치료 결과

46 1 , 45 .

고 찰

(unilocular) 가 (Fig. 1A), 가 , Caldwell - Luc (pyocele) 4)7) 40~50 2)4) (endoscopic (inferior meatal antrostomy) 24 (52.2%), 22 (47.8%) 51.8 (40~50 가 21 (45.7%) 가 . 1)4)8) Luc .

가
 가⁹⁾
 24 22
 16 (72.7%) 가¹⁾²⁾⁶⁾
 (fibrous dysplasia)
 가¹⁾⁴⁾⁶⁾⁷⁾¹⁰⁾¹¹⁾
 가 (pseudostratified
 columnar epithelium)
 (cuboidal epithelium)⁷⁾¹¹⁾
 가 26 (56.5%) Kennedy²⁾ 18
 Caldwell - Luc²⁾ 15
 24
 2 Gady¹⁵⁾ 108
 1 0%
 가¹⁶⁾
 가 18 1
¹⁾²⁾⁴⁾ 17) 8 18) 10
 12 가 18 15 22
 18 20
 20 1
 가 13 24
 가 4
 X- 10
 가 (osteoplastic frontal
¹⁾⁴⁾⁵⁾ sinus surgery)
¹⁾²⁾⁴⁾ 46
 가 (nasofrontal recess)
 (epidermoid cyst),¹⁾⁶⁾
 (gumma), 24 20 Cald-
 well - Luc
¹²⁻¹⁴⁾

(new bone formation)
 가
 Caldwell - Luc
 가
 (contracture)
 가
 편 편
 22
 22 20
 1
 24 , 18
 , 20 Caldwell - Luc
 4 Caldwell - Luc

중심 단어 :

REFERENCES

- 1) Beasley NJP, Jones NS. *Paranasal sinus mucocoeles: modern management. Am J Rhinol* 1995;9:251-6.
- 2) Kennedy DW, Josephson JS, Zinreich J. *Endoscopic sinus surgery for mucocoeles: a viable alternative. Laryngoscope* 1989;99:885-95.
- 3) Evans C. *Aetiology and treatment of frontoethmoidal mucocoele. J Laryngol Otol* 1981;95:361-75.
- 4) Iannetti G, Cascone P, Valetini V. *Paranasal sinus mucocoele: diagnosis and treatment. J Craniofac Surg* 1997;8:391-8.
- 5) Nass RL, Holliday RA, Reede DL. *Diagnosis of surgical sinusitis using nasal endoscopy and computerized tomography. Laryngoscope* 1989;99:1158-60.
- 6) Ikeda K, Takahashi C, Oshima T, Suzuki H. *Endonasal endoscopic marsupialization of paranasal sinus mucocoeles. Am J Rhinol* 2000;14:107-11.
- 7) Zizmor J, Ganz AR. *Mucocoeles of paranasal sinuses. N Y State J Med* 1972;72:1710-5.
- 8) Lund VJ. *Endoscopic management of paranasal sinus mucocoeles. J Laryngol Otol* 1998;112:36-40.
- 9) Shin HS, Lee BJ, Kim JH, Kim YJ. *Frontal sinus mucocoele: a comparison of extranasal operation and intranasal endoscopic marsupialization. Korean J Otolaryngol* 1996;39:463-71.
- 10) Busaba NY, Salman SD. *Maxillary sinus mucocoeles: clinical presentation and long-term results of endoscopic surgical treatment. Laryngoscope* 1999;109:1446-9.
- 11) Oei T, Gillissen JP. *Mucocoele. Ophthalmologica* 1975;171:55-6.
- 12) Lundgren A, Olin T. *Mucopyocoele of sphenoidal sinus or posterior ethmoid cells with special reference to apex orbit syndrome. Acta Otolaryngol* 1961;53:61-79.
- 13) Clyde AH. *Mucocoele of the accessory nasal sinuses. Arch Otolaryngol* 1988;7:150-5.
- 14) Kim YM, Park YM, Koh YC. *A case of mucocoele of the sphenoid sinus causing complete visual loss. Korean J Otolaryngol* 1992;35:590-5.
- 15) Har-El G. *Endoscopic management of 108 sinus mucocoeles. Laryngoscope* 2001;111:2131-4.
- 16) Kim SS, Kang SS, Kim KS, Yoon JH. *Clinical characteristics of primary paranasal sinus mucocoeles and their surgical treatment outcome. Korean J Otolaryngol* 1998;41:1436-9.
- 17) Kwon SH, Jeong WC. *Endoscopic sinus surgery for paranasal sinus mucocoele. Korean J Otolaryngol* 1997;40:1431-6.
- 18) Lee KC, Kwon KH, Kang HG, Jin SM. *Endoscopic sinus surgery in paranasal sinus mucocoeles. Korean J Otolaryngol* 1997;40:855-60.