

중이내 이상내경동맥 1례

박철원 · 신대현 · 정승원 · 안경성

A Case of Aberrant Carotid Artery in the Middle Ear

Chul Won Park, MD, Dae Hyun Shin, MD,
Seung Won Jeong, MD and Kyung Sung Ahn, MD

Department of Otolaryngology, College of Medicine, Hanyang University, Seoul, Korea

- ABSTRACT -

Vascular masses in middle ear space are uncommon, and include high dehiscent jugular bulb or a glomus tumor occurring most frequently. The bone over the carotid artery may be dehiscent, resulting in the appearance of a vascular mass in the anteroinferior quadrant as it passes in its usual course through the middle ear. Less frequently, internal carotid artery courses aberrantly within middle ear space. If aberrant carotid artery was misdiagnosed, surgical intervention can lead to massive bleeding, possible hemiparesis, or both. We found vascular mass in middle ear during tympanomastoidectomy in a patient with tinnitus. Postoperatively we checked up dynamic temporal bone CT and diagnosed aberrant carotid artery. (**J Clinical Otolaryngol 2000;11:124-128**)

KEY WORDS : Aberrant carotid artery · Tinnitus · Dynamic temporal bone CT.

서 론

2)

50 가

2 가

3)

42

1)

dynamic

1

증 례

: 2000 1 27

: 2000 4 10

: , 133 - 792

17

42

1993 1

: (02) 2290 - 8580 · : (02) 2293 - 3335

E - mail : HYENT@chollian.net

가

1993

1

1998 11

1985

가

20 dB 65 dB
20 dB 40 dB

(inferior tympanic canaliculus)
(Fig. 1).

6

27 G

. 1 : 100,000 epinep -



Fig. 1. Coronal temporal bone CT shows soft tissue density in antrum, attic and middle ear cavity including hypotympanum. Enlarged inferior tympanic canaliculus (arrow) was noted.

hrine

dynamic

(Figs. 2 and 3).

(Fig. 4).

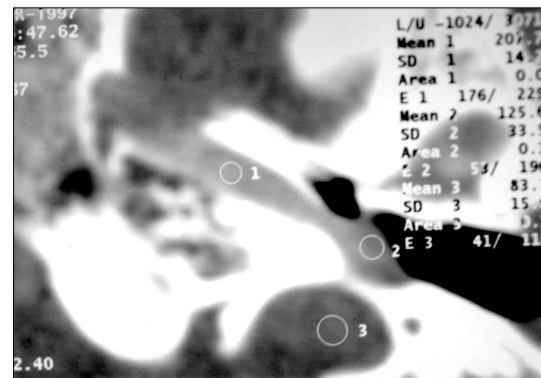


Fig. 2. Early arterial phase view of contrast enhanced axial dynamic temporal bone CT shows well-defined soft tissue density (2) in middle ear cavity. It is enhanced nearly equally to internal carotid artery (1), but internal jugular vein (3) is not still enhanced. Posterolateral wall of horizontal part of carotid canal is dehiscent.



Fig. 3. The late venous phase view of contrast enhanced axial dynamic temporal bone CT shows well-defined soft tissue density (2) in middle ear cavity. It is enhanced nearly equally to internal carotid artery (1) and internal jugular vein (3).

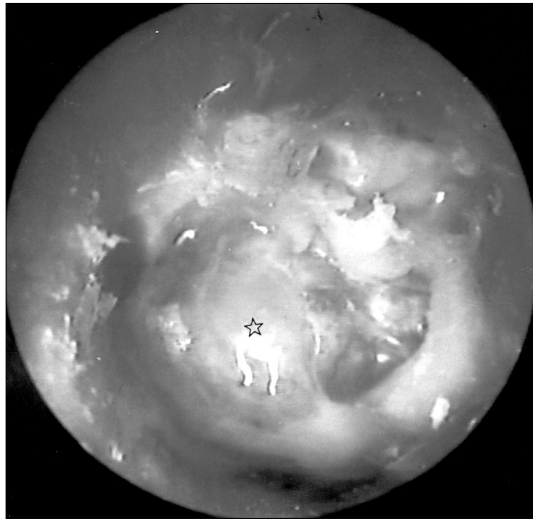


Fig. 4. Postoperative endoscopic photograph taken at three month after operation shows pink colored mass (☆) in middle ear cavity.

(stapedial artery)
(caroticotympanic artery)

(caroticotympanic artery)

affen⁹⁾

³⁾⁷⁾⁸⁾ St -

가

0.5 mm
1%

⁵⁾

가

고찰

1899 Max가
1903 Hansen
⁴⁾ 가
1971 Goldman ⁵⁾
1 1960 Otologic me -
dical group 가 2
가 (glomus tympanicum)
1 (hemi -
paresis) 1 ⁶⁾
가
0.5 mm
⁶⁾
3
4
3
(ventral pharyngeal artery)

Glasscock ⁷⁾
¹⁰⁾
McElveen ¹⁾ 가
Selesnick ¹¹⁾

1

HU

Lapayowker¹²⁾ 가

(vestibular line) - 가

100

3

4) Ru -

ggles Reed

13)

Glasscock⁷⁾ 가

Digital subtraction angiography(DSA)

(magnetic resonance angiography)

silastic

14)

(retrograde jugular ven-

ography), , DSA, 가 dynamic

4)

CT Dy -

CT X

가

3)

CT

dynamic

1

중심 단어 :

REFERENCES

2 Hou -

nsfield unit(HU)

38 (: 254

HU, : 127 HU)

42 (234 HU)

- 1) Anderson JM, Stevens JC, Sundt YM, Stockard JJ, Pearson BW. *Ectopic internal carotid artery seen initially as middle ear tumor. JAMA 1983;249:2228-30.*
- 2) Ashikaga R, Araki Y, Ishida O. *Bilateral aberrant internal carotid arteries. Neuroradiology 1995;37:655-7.*
- 3) Kim JH, Kim DI, Kim HJ, Yoon DY. *Aberrant internal ca-*

- rotid artery in the middle ear. Korean J Otolaryngol 1997; 40:619-23.*
- 4) McElveen JT, Lo WWM, El Gabri TH, Nigri P. *Aberrant internal carotid artery: Classic findings on computed tomography. Otolaryngol Head Neck Surg 1986;94:616-21.*
 - 5) Goldman NC, Singleton GT, Holly EH. *Aberrant internal carotid artery presenting as a mass in the middle ear. Arch Otolaryngol 1971;94:269-73.*
 - 6) Campbell G, Renner G, Estrem SA. *Bilateral aberrant internal carotid arteries. Otolaryngol Head Neck Surg 1992; 107:124-8.*
 - 7) Glasscock ME, Dikins JR, Jacson CG, Wiet RJ. *Vascular anomalies of the middle ear. Laryngoscope 1980;90:77-88.*
 - 8) Glasscock ME, Seshul M, Seshul MB. *Bilateral aberrant internal carotid artery-case presentation. Arch Otolaryngol Head Neck Surg 1993;119:335-9.*
 - 9) Steffen TM. *Vascular anomalies of the middle ear. Laryngoscope 1968;78:171-91.*
 - 10) Cole RD, May JS, Winston-Salem. *Aberrant internal carotid artery. Southern Medical Journal 1994;87:1277-80.*
 - 11) Selesnick SH, Lessow AS. *Aberrant internal carotid artery. Am J Otol 1999;20:403-4.*
 - 12) Lapayowker MS, Liebman EP, Robins ML, Safer JN. *Presentation of the internal carotid artery as a tumor of the middle ear. Radiology 1971;98:293-7.*
 - 13) Ruggles RL, Reed RC. *Treatment of aberrant carotid arteries in the middle ear. Laryngoscope 1972;82:1199-205.*
 - 14) Goodman RS, Cohen NI. *Aberrant carotid artery in the middle ear. Laryngoscope 1981;90:67-9.*