

# 돌발성 난청 환자에서 FAST SPIN ECHO MRI의 의의

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= Abstract =

## The Significance of Fast Spin Echo MRI in Patients with Sudden Sensorineural Hearing Loss

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**Background :** Patients with acoustic neuroma(AN) may have sudden sensorineural hearing loss (S-SNHL). The prevalence of AN in patients with S-SNHL is 0.8% to 30%. Thus, a lot of diagnostic tools have been used to screen of AN from S-SNHL. Usually, Gadolinium(Gd) enhanced MRI have been recommended. Recently, Fast spin echo MRI(FSE MRI) have been shown to be equally effective in detection of acoustic neuroma as Gd enhanced MRI.

**Objective :** To assess the value of FSE MRI as a screening test in patients with S-SNHL.

**Materials and Methods :** From January 1995 to August 1996, We evaluated FSE MRI and Gd enhanced MRI for 45 patients with S-SNHL.

**Result :** We could screen 4 cases of AN patient from them.

**Conclusion :** FSE MRI is effective in the detection of AN in S-SNHL patients. (Korean J Otolaryngol 40 : 9, 1997)

**KEY WORDS :** Sudden sensorineural hearing loss · Fast spin echo MRI.

서 론

가

가

가

가  
Gd  
가  
FSE MRI가  
가  
Gd  
4)  
FSE MRI  
4  
FSE MRI가

FSE MRI  
가  
21, 24  
23 80 44.5

결 과

45 4 (8.9%) FSE MRI  
Gd  
3 (Fig. 1, Fig. 2, Fig. 3)  
1 (Fig. 4) 4

재료 및 방법

1995 1 1996 8 20  
45

1 2

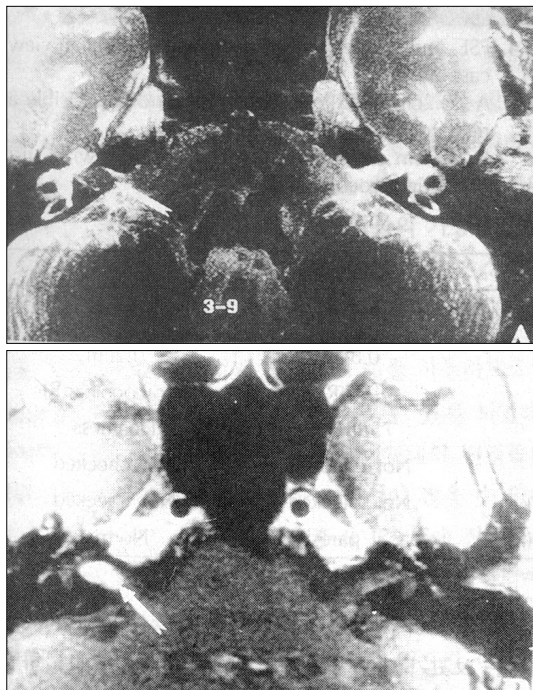


Fig. 1. FSE and Gd enhanced temporal MRI(axial view, case I).  
A : 0.8cm sized low signal mass(arrow) is visible at right internal auditory canal.  
B : 0.8cm sized Gd enhanced mass(arrow) is visible at right internal auditory canal.

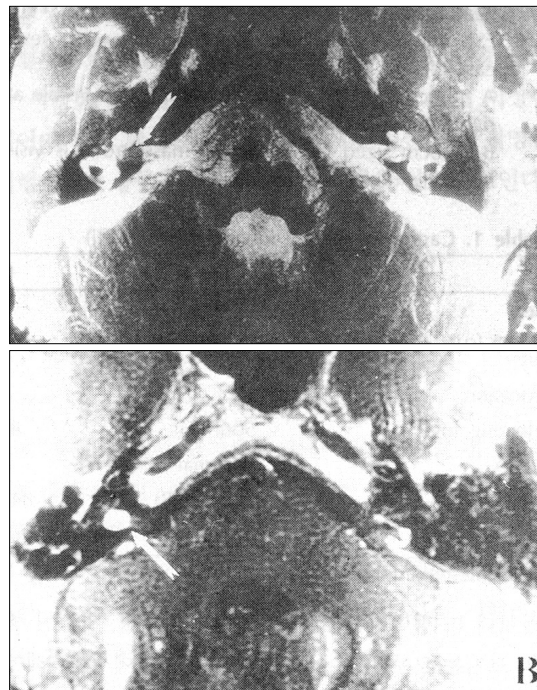
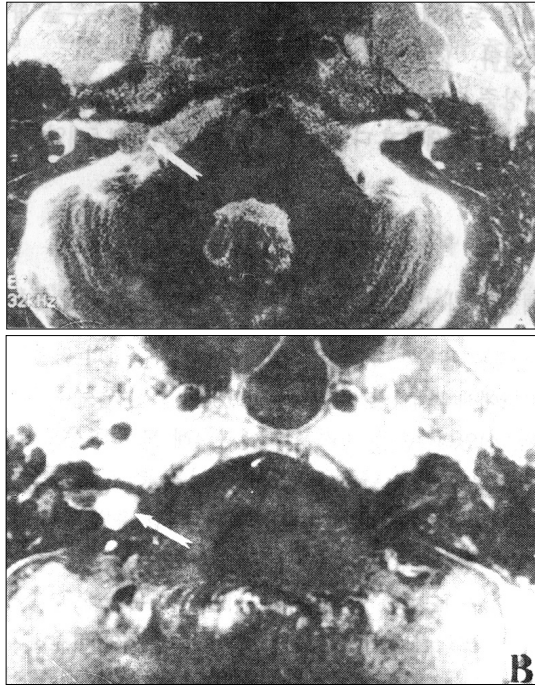
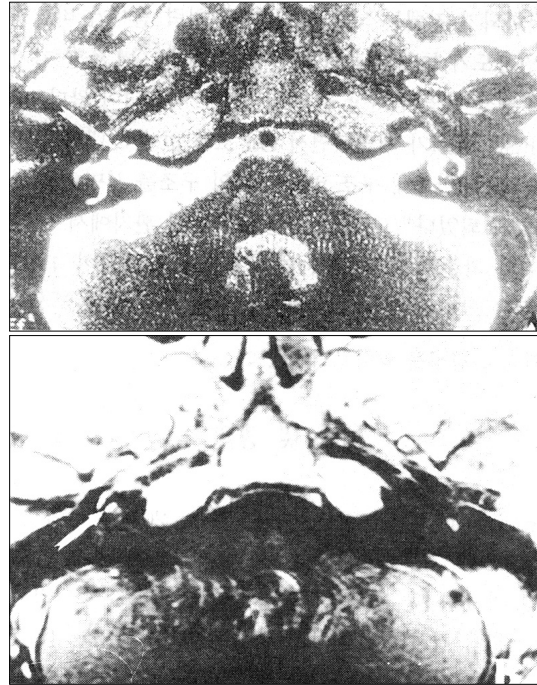


Fig. 2. FSE and Gd enhanced temporal MRI(axial view, case II ).  
A : 0.5cm sized low signal mass(arrow) is visible at right internal auditory canal.  
B : 0.5cm sized Gd enhanced mass(arrow) is visible at right internal auditory canal.



**Fig. 3.** FSE and Gd enhanced temporal MRI(axial view, case III).  
 A : 0.8cm sized low signal mass(arrow) is visible at right internal auditory canal.  
 B : 0.8cm sized Gd enhanced mass(arrow) is visible at right internal auditory canal.



**Fig. 4.** FSE and Gd enhanced temporal MRI(axial view, case ).  
 A : 0.2cm sized low signal mass(arrow) is visible at right cochlear apex.  
 B : 0.2cm sized Gd enhanced mass(arrow) is visible at right cochlear apex

2  
 0.8% 30% 2)3)  
 , 1960  
 1cm  
 3 0.5cm 0.8cm  
 1 0.2cm (Table 1).

고 찰

1917 Cushing <sup>5)</sup>

가 <sup>6)</sup>. Moffat <sup>1)</sup>  
 10.2%가

가 가

가 ,  
 . 1970  
 Air contrast  
 1cm 가  
 Air contrast  
 가 <sup>3)</sup>.

**Table 1.** Case review(AN is founded at FSE MRI)

	Case	Case	Case	Case
Sex	F	F	F	F
Age	44	62	58	47
Size	0.8cm	0.5cm	0.8cm	0.2cm
Location	IAC(R)	IAC(R)	IAC(R)	Intracochlear(R)
Hearing loss	50dB HL	45dB HL	75dB HL	Deafness
BERA	Normal	Normal	Not checked	Not checked
SRT	76%(75db)	84%(db)	Not checked	Not checked
Caloric test	Normal	Canal paresis(R)	Canal paresis(R)	Normal

\*IAC(internal auditory canal)

Brackmann<sup>7)</sup> 96% 가 가 , , FSE MRI Gd MRI  
 1 2 caloric test 가 가  
 가 , 45 FSE MRI  
 가 4 , FSE MRI  
 1988 Gd 3 0.5cm 0.8cm  
 , 1 0.2mm  
 3mm 4 2 FSE MRI가  
 8) Gd  
 6 18 1cm  
 FSE MRI  
 Focusing pulse Scanning 결 론  
 film 가 1995 1 20  
 FSE MRI 45 FSE  
 T2 MRI 8.9%  
 Gd Gd

, FSE MRI가

Gd

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