

: 2 1

2 .

가

,
가

가

2

(brain CT)

(meningoencephalocele)

(Fig. 1B). MR

T1

, T2

(atretic cephalocele)

(forme fruste)

T1

(Fig. 1C-E).

가

(1,2).

(dermoid cyst)

(sinus pericranii)

(1),

2

(fibroblast)

(glial tissue)

(Fig. 1F),

GFAP(glial fibrillary acidic protein)

1

7

가

가

2.0cm

가

가

2

3

가

3×4cm

가

가

가

가

가

(nystagmus)

5×3mm

(Fig. 1A).

0.8×1.1cm

가

1

2

1999 11 9

1999 12 14

(Fig.

2A).

. MR

T1

, T2

(Fig. 2B-D).

Joubert

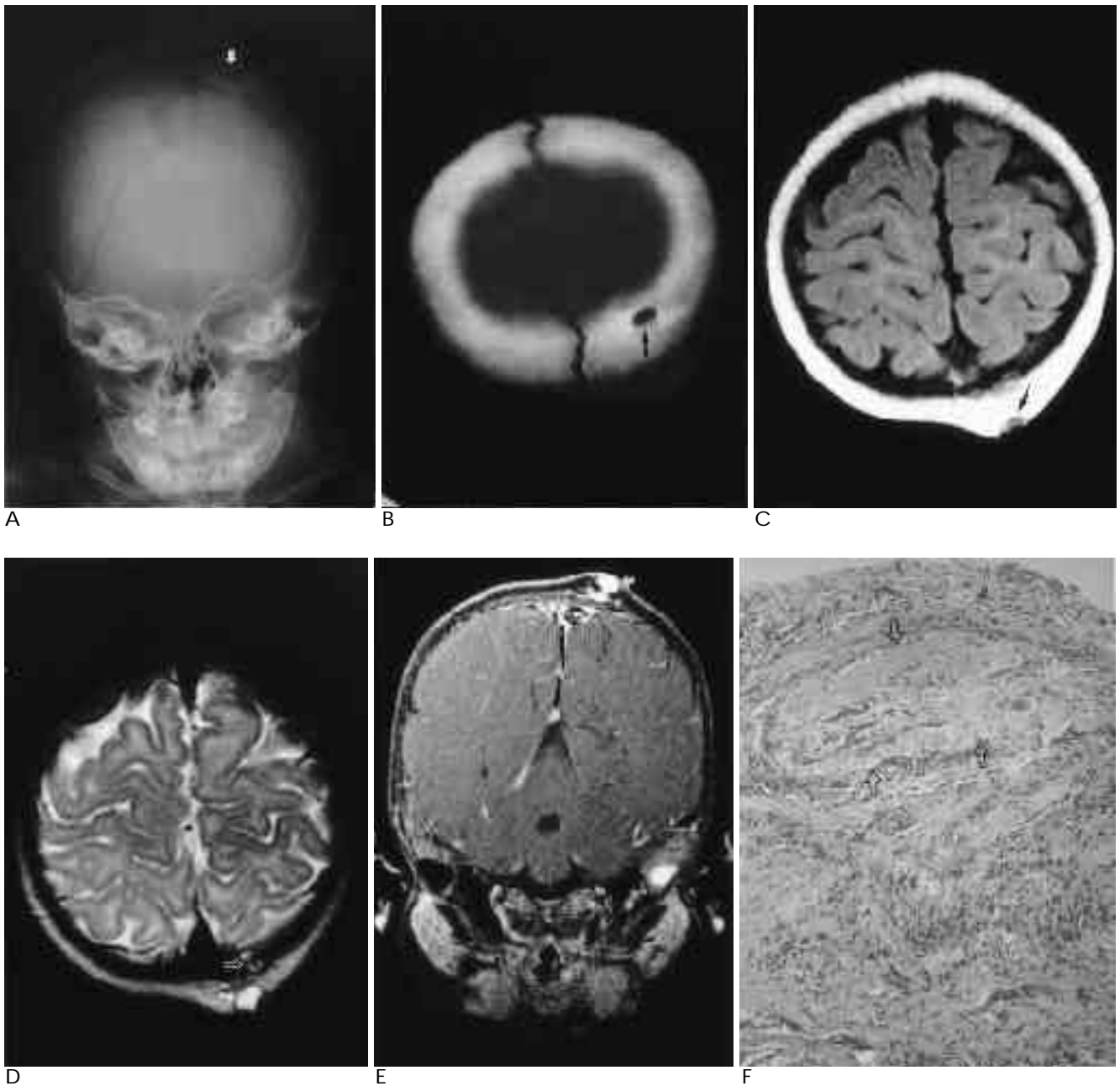


Fig. 1. A 7-month-old male patient with parietal atretic cephalocele.

A. Simple skull AP shows small osteolytic lesion (arrow) at left parietal bone near midline.

B. On bone setting of brain CT, elongated bony defect is seen (arrow), which extends from outer table near scalp nodule to inner table.

C. On T1-weighted image, small nodule (arrow), which is isosignal to brain parenchyme, is located just beneath the skin of left parietal scalp.

D. On T2-weighted image, the lesion (arrow) is seen as high signal nodule, and tortuous linear high signal intensity is also seen in left parietal bone (open arrow).

E. On fat-suppressed contrast-enhanced T1-weighted coronal image, well-enhancing nodule (arrow) is seen and it extends intracranially through bony defect.

F. Microscopic finding reveals meningotheelial cell proliferation and dense fibrosis with a small portion of the cerebral tissue (arrows). (H&E; $\times 200$)

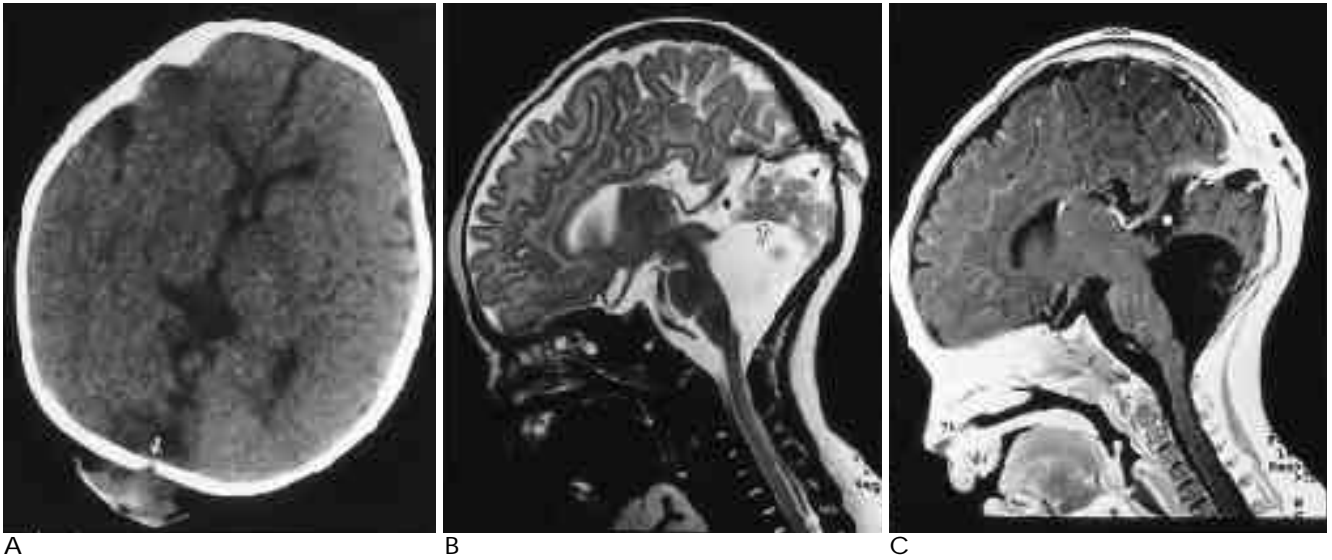


Fig. 2. A 3-month-old female patient with occipital atretic cephalocele.

A. Precontrast brain CT shows scalp mass at the midline of occipital scalp with bony defect (arrow).

B. T2-weighted sagittal image shows heterogeneous and high signal intensity mass (arrow) with intracranial protrusion (arrowhead) through skull defect and hypoplastic cerebellar vermis (open arrow) is seen with widened 4th ventricle.

C. Contrast-enhanced T1-weighted sagittal image shows heterogeneous enhancement of the mass (arrows), and it is located near torcular Herophili.

가 (2). 1
(osseous metaplasia) 가 , 2
(1). 1 2
2 1 가
MR
(cephalocele) ,
(gliocele), 가 (1,4,5).
(2). Yokota (4) (porencephaly),
(diencephalic cyst),
(abortive), (occult), (rudimentary) Lage (1) 가 , Martinez-
(1). 가 가 (3).
37.5-50% 1 Joubert
(1,2). 8 Martinez-Lage
10 35mm 가 (1),
가 가

MR

가

가

가

가

(1).

MR

1. Martinez-Lage JF, Sola J, Casas C, et al. Atretic cephalocele: the tip of the iceberg. *J Neurosurg* 1992;77:230-235
2. Naidich TP, Altman NR, Braffman BH, McLone DG, Zimmerman RA. Cephalocele and related malformation. *AJNR* 1992;13:655-690
3. Reigel DH. *Encephalocele*. In Section of pediatric neurosurgery of the american association of neurological surgeons(eds). *Pediatric neurosurgery. Surgery of the developing nervous system*. New York: Grune & Stratton, 1982:49-60
4. Yokota A, Kajiwaru H, Kohchi M, Fuwa I, Wada H. Parietal cephalocele: clinical importance of its atretic form and associated malformations. *J Neurosurg* 1988;69:545-551
5. Curnes JT, Oakes WJ. Parietal cephaloceles: radiographic and magnetic resonance imaging evaluation. *Pediatr Neurosci* 1988;14:71-76

J Korean Radiol Soc 2000;42:363-366

Atretic Cephalocele : Report of Two Cases¹

Soo Yeon Kim, M.D., Ghi Jai Lee, M.D., Jae-Chan Shim, M.D., Hae Jeong Jeong, M.D.,
Mee Joo, M.D.², Ho Kyun Kim, M.D

¹Department of Diagnostic Radiology, Inje University College of Medicine

²Department of Pathology, Inje University College of Medicine

In cases of meningoencephalocele, brain tissue, which is enveloped by the meninges and cerebrospinal fluid, herniates through the skull defect. Atretic cephalocele, on the other hand, is a congenital malformation in which small meningeal and vestigial glial tissue herniates through this defect; a benign nodular lesion is found near the midline of the scalp. Atretic cephalocele can occur in the parietal or occipital area; in cases involving the latter, the prognosis is poor. We report the radiologic findings of two cases of atretic cephalocele confirmed by surgery and pathologic findings.

Index words : Brain, abnormalities
Skull, abnormalities

Address reprint requests to : Ghi Jai Lee, M.D., Department of Diagnostic Radiology, Seoul Paik Hospital, College of Medicine, Inje University.
#2-85, Jur-dong, Chung-ku, Seoul, 100-032 Korea.
Tel. 82-2-2270-0134 Fax. 82-2-2266-6799