



17 CT MRI
가
1

(telangiectatic osteosarcoma)
5% (subgroup)
(1). 가 (Fig. 1D, E).
T2
(2, 3),
17
1 CT MR T2
(Fig. 1F, G).
, CT MR

17 가
5
(swelling) , 3
가
가
가
(Fig. 1H, I).
CT MR . CT 1
(sphenoid bone)
(2, 3).
(zone of transition),
(Fig. 1A). (1, 3, 4).
CT
T1
(Fig. 1B, C).
(anaplastic)
가
가
가
가
(1, 3, 4). , Matsuno (1), Mervac (4),
Unni (5) , 가
2002 10 22 2003 3 31
305

가 (aneurysmal bone cyst), (giant cell tumor), (chondroblastoma), (fibrous dysplasia), (simple bone cyst),

(Fig. 1A).

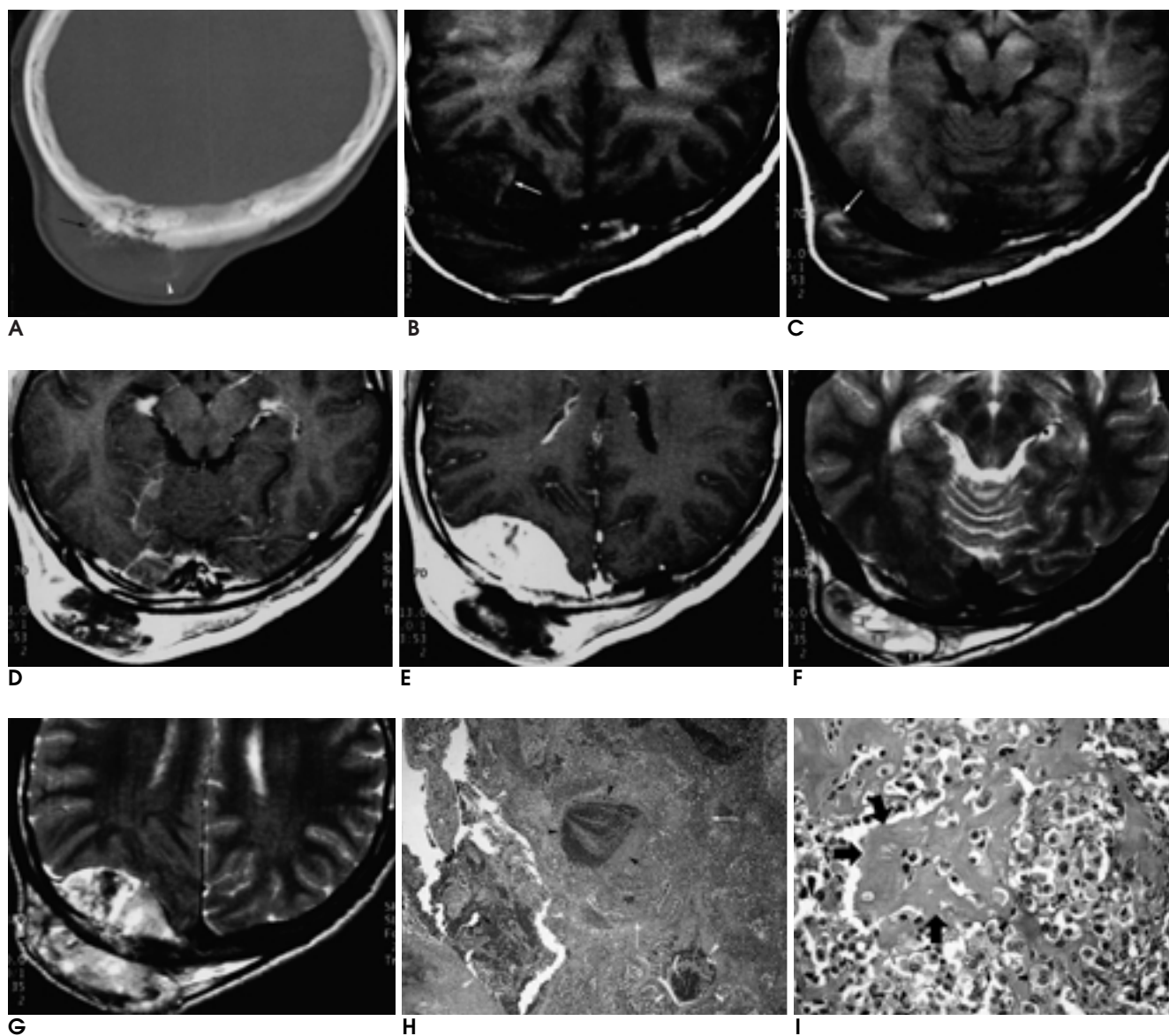


Fig. 1. Telangiectatic osteosarcoma of the skull in a 17-year-old man.

A. Bone window axial CT scans demonstrate a osteolytic bone lesion of the right parietal bone and a large scalp mass with matrix calcification (arrowhead) and periosteal reaction (arrow).

B, C. On axial T1-weighted images, the mass shows homogeneous isosignal intensity and multiple foci of the high signal intensities (arrows).

D, E. After infusion of the contrast media, osseous and intracranial portions of the mass are strongly homogeneously enhanced and the non-enhanced large portion and enhanced septae are seen in the extracranial portion. There is no enhancement in the adjacent brain parenchyma.

F, G. On axial T2-weighted images, multiple fluid-fluid levels (arrows) are well demonstrated in the extracranial portion of the mass and have lower dark signal intensity and upper high signal intensity.

H. Photomicrograph shows that the lesion consists of the large cystic spaces (arrowheads) filled with blood and malignant stroma (arrows) (H & E stain, × 40).

I. Photomicrograph shows the pleomorphic and atypical tumor cells (small arrows) and malignant osteoid (large arrows) in the septae (H & E stain, × 400).

(recurrent malignant histiocytoma),
(6).

(9).

33.3% 50

CT

(7)

가

(Fig. 1A).

가

1/3

19 -

39%

. 20

Shramek (11)

가

MR

(8),

CT MR

(Fig. 1A).

가

MR

가

(6).

T1

, T2

(Fig. 1B, C, F, G).

(9).

8.6%가

0.5%

Parget ,

(fibrous dysplasia),

(multiple

osteochondromatosis),

(myositis ossifi-

cans),

. 1993 Shinoda (10) 99

, 17

, 14

(88 - 75%)

가

가

가

(1),

가

(3).

34

1. Matsuno T, Unni KK, McLeod RA, Dahlin DC. Telangiectatic osteogenic sarcoma. *Cancer* 1976;38:2538-2347
2. Whitehead RE, Melhem ER, Kasznica J, Eustace S. Telangiectatic osteosarcoma of the skull base. *AJNR Am J Neuroradiol* 1998;19: 754-757
3. Huvos AG, Rosen G, Bretsky SS, Butler A. Telangiectatic osteogenic sarcoma: a clinicopathologic study of 124 patients. *Cancer* 1982;49:1679-1689
4. Mervak TR, Unni KK, Pritchard DJ, McLeod RA. Telangiectatic osteosarcoma. *Clin Orthop* 1991;270:135-139
5. Unni KK. Osteosarcoma of bone. *J Orthop Sci* 1998;3:287-294
6. Davies AM, Cassar-Pullicino VN, Grimer RJ. The incidence and significance of fluid-fluid levels on computed tomography of osseous lesions. *Br J Radiol* 1992;65:193-198
7. Bertoni F, Unni KK, Beabout JW, Ebersold MJ. Giant cell tumor of the skull. *Cancer* 1992;70:1124-1132
8. Kransdorf MJ, Sweet DE. Aneurysmal bone cyst: concept, controversy, clinical presentation, and imaging. *AJR Am J Roentgenol* 1995;164:573-580
9. Lee YY, Van Tassel P, Nauert C, Raymond AK, Edeiken J. Craniofacial osteosarcomas: plain film, CT, and MR findings in 46 cases. *AJR Am J Roentgenol* 1988;150:1397-1402
10. Shinoda J, Kimura T, Funakoshi T, et al. Primary osteosarcoma of the skull. A case report and review of the literature. *J Neurooncol* 1993;17:81-88
11. Shramek JK, Kassner EG, White SS. MR appearance of osteogenic sarcoma of the calvaria. *AJR Am J Roentgenol* 1992;158:661-662

CT and MR Findings of the Telangiectatic Osteosarcoma Arising from the Skull: Case Report¹

Hyo-Rim Kim, M.D., So-Lyung Jung, M.D., Bum-Soo Kim, M.D.,
Won-Jong Yoo, M.D.², Jeong-Su Jun, M.D.³, Ji-Han Jung, M.D.⁴

¹Department of Radiology, Kangnam St. Mary 's Hospital, College of Medicine, The Catholic University of Korea

²Department of Radiology, Holy Family Hospital, College of Medicine, The Catholic University of Korea

³Department of Radiology, St. Vincent 's Hospital, College of Medicine, The Catholic University of Korea

⁴Department of Clinical Pathology, Kangnam St. Mary 's Hospital, College of Medicine, The Catholic University of Korea

Telangiectatic osteosarcoma is rare malignant tumor causing aggressive bone destruction, though the skull is very rarely involved. We report a case in which the condition affected the skull of a 17-year-old male, involving the parietal bone and with intracranial and extracranial extension. CT and MR images depict an osteolytic lesion of the right parietal bone and an enhancing solid mass in the intracranial and extracranial portions. Matrix calcifications, periosteal reaction, and multiple fluid-fluid levels are seen within the masses.

Index words : Skull, primary neoplasms

Skull, CT

Skull, MR

Skull, osteosarcoma

Address reprint requests to : So-Lyung Jung, M.D., Department of Radiology, Kangnam St. Mary 's Hospital, College of Medicine,
The Catholic University of Korea, 505 Banpo-dong, Seocho-gu, Seoul 137-040, Korea.
Tel. 82-2-590-2324 Fax. 82-2-599-6771 E-mail: sljung1@catholic.ac.kr