

	* .	* .	** .
(bone island)			
cm	가	2 cm	가
31		10x1.7x1 cm	1

가		30	가 3
2 cm	1% ¹³⁾	가 2 cm	
		1,3,4,6-8,15,16)	1/3
“가 (thorny radiations)”			X
“ (pseudopodia)”		1/3	
가		가	

:
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(Fig. 1).
10×1.7×1 cm T1-, T2-

(Fig. 2).

3).

가 (Fig.

(Fig. 4).

(Fig. 1),



Fig. 1. Lateral radiograph of the right tibia shows large homogeneously radiodense intramedullary mass with relatively smooth margin in the diaphysis (A). After incisional biopsy was done, lateral radiograph shows biopsy induced lesion defect that reflects correct biopsy targeting (B).

가 0.1 2 cm 가 2 cm 가
1, 3, 4, 6-8, 15, 16)

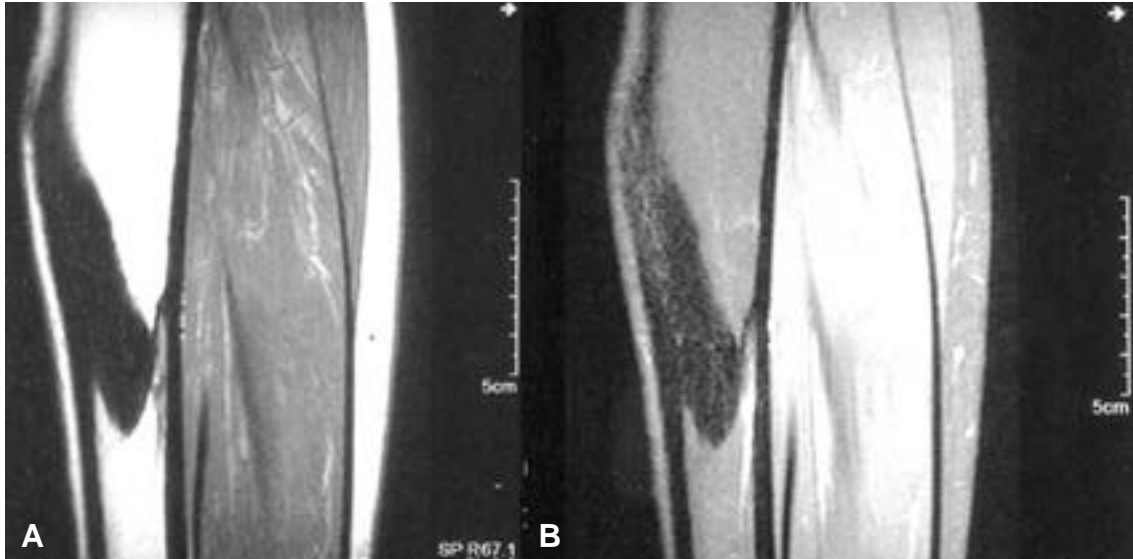


Fig. 2. T1-weighted (A) and T2-weighted (B) MR images of the sagittal plain show a low-signal intensity giant lesion without cortical destruction or soft tissue abnormality.

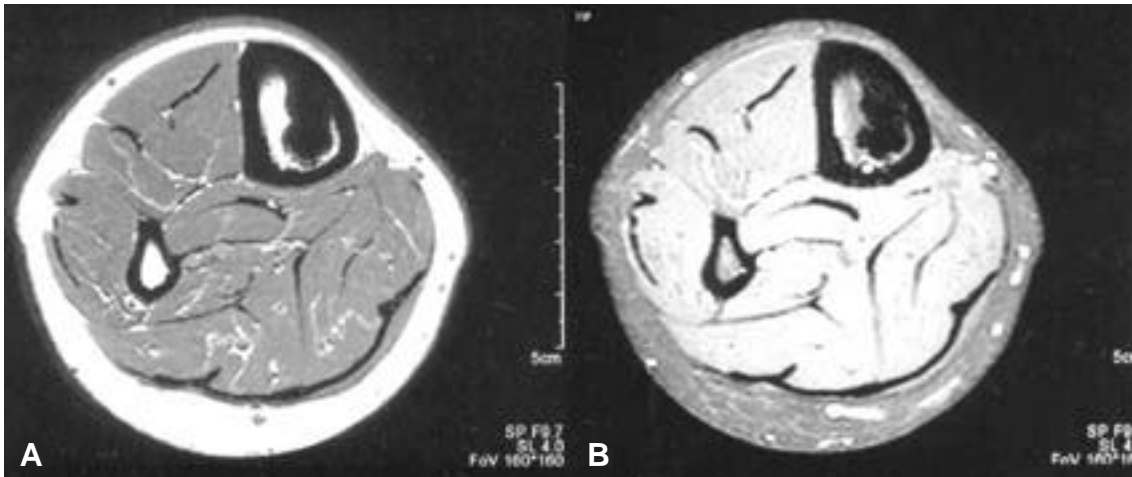


Fig. 3. T1-weighted (A) and T2-weighted (B) MR images of the axial plain show scalloped margin with focal bony streaks.

Table 1. Giant bone islands in the literature

Author	Size (cm)	Site	Age/Sex
Smith J (1973) ¹⁵	3.5x4	ilium	35/M
	2.5x2.5	ilium	19/M
Ehara S (1989) ⁴	4x3.5	femur, distal	25/M
Gold RH (1989) ⁶	5.5x4.5	tibia, metaphysis	32/M
Greenspan A (1991) ⁷	5.0x3.2	ilium	36/M
Brien EW (1995) ³	10.5x4.8x4.0	femur, proximal	42/M
Avery GR (1995) ¹	8x5	femur, proximal	35/M
Greenspan A (1996) ⁸	4x3x2.5	femur, medial condyle	33/F
Trombetti A (2002) ¹⁶	5.5x4	ilium	78/M
Our case	10x1.7x1	tibia, diaphysis	30/M

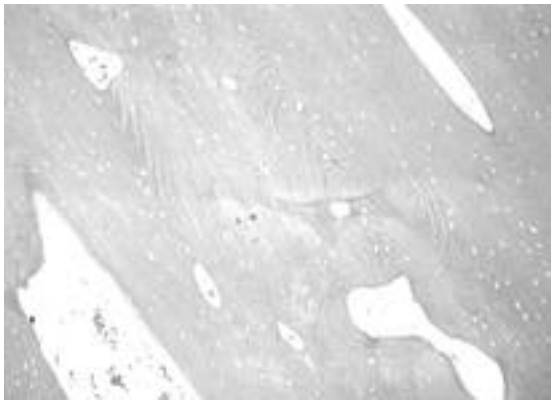


Fig. 4. Histologic findings of the mass reveal lamellar bone architecture with Haversian canals (H & E, x 40).

(Table 1).

가
가

138 9). Onitsuka¹³⁾ 가 가
 , Blank 21 가 가
 Lieber²⁾ 6 , Ngan¹²⁾ 3

가

가 ,

(endosteal cortex)

3,4,6,16) “가
 ” “ ” 가
 9) “가
 ” “ (cumulus
 cloud)” 9,11)
 (melorh-
 eostosis), (stress fracture)
 9)
 5)
 , T-2
 가
 10)
 , 가 가
 14)
 (nidus) 가
 가 가
 (bony trabeculae) 가
 가
 가
 (well-differentiated intramedullary osteosar-
 coma) 20
 40

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Abstract

Giant Bone Island of the Tibia - A Case Report -

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A bone island represents a focus of mature compact bone within the cancellous bone. It can be diagnosed based on characteristic clinical and radiologic features. The lesion is typically asymptomatic with a preference for the pelvis, femur, and other long bones. On the radiologic study, the lesion appears as an ovoid, round, or oblong homogeneously dense and sclerotic focus in the cancellous bone. Characteristic feature of this lesion is radiating bony streaks, known as "thorny radiations" or "pseudopodia". Most bone islands are small, and majority of the lesions measure from 0.1 to 2.0 cm. Giant bone island, defined as a diameter greater than 2 cm, has been rarely reported in the literature. We report a case of giant bone island measured by 10 × 1.7 × 1 cm in the diaphysis of right tibia in 31-year-old man.

Key Words: Tibia, Giant bone islands

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