
5
: 1997 1 2001 7
1 (2.2 : 1.1 5) 가 5
23 (21 29) 1 , 4
2
T₁ T₂
, Technetium-99 m 가
. 1 5 1
가 4

가 가 10%^{1,5)}
가^{2,3)}

: 1가 10

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(local adjuvant therapy), (en bloc resection)

2,10)
5

cm (Fig. 3).
30

1997 1 2001 7

1 (2.2 : 1.1 5) 가 5 (Fig. 1), (Fig. 2) () 1 2 3 , 3 2 (pathologic fracture)

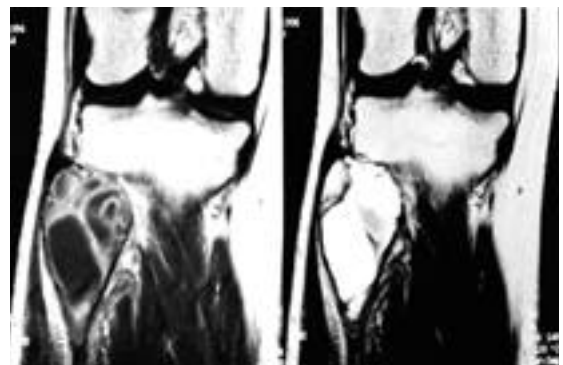


Fig. 2. Preoperative coronal T1-weighted spin echo MR image of 25 year-old female showing low signal intensity in proximal epiphysis and meta-diaphysis of right proximal fibula and high signal intensity in T2-weighted image finally confirmed giant cell tumor.



Fig. 1. Preoperative plain radiographs showing the classic features of a giant cell tumor, including faint trabeculation and mild osseous expansion, involving proximal portion of right fibula.

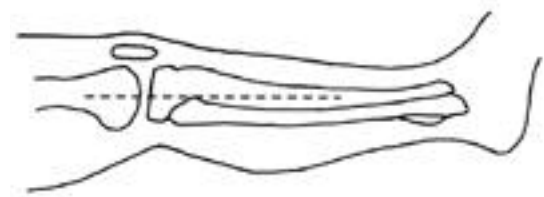


Fig. 3. Diagram showing skin incision, a longitudinal incision was made from the lateral femoral condyle across the knee joint over the proximal fibula depending on the length of the bone resection.

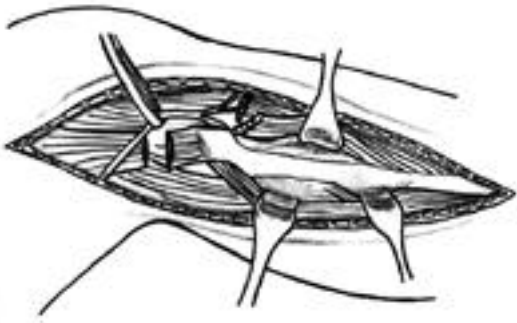


Fig. 4. Diagram showing exposure and mobilization of peroneal nerve and division of the biceps femoris tendon.

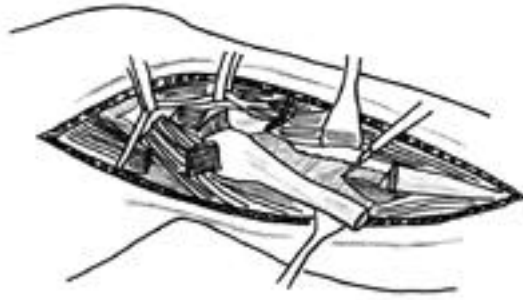


Fig. 5. Diagram showing division of the interosseous ligament, lateral collateral ligament, capsule of the proximal tibiofibular joint, and origins of the peroneal and soleus muscles.

가
 (vessel loop)
 1 cm
 (Fig. 4).
 2 cm
 (Fig. 5).
 20 (isometric point)
 □ (staple) 20
 2
 (Fig. 6). 4
 weigh bearing walking) 6 (full
 12 가
 가

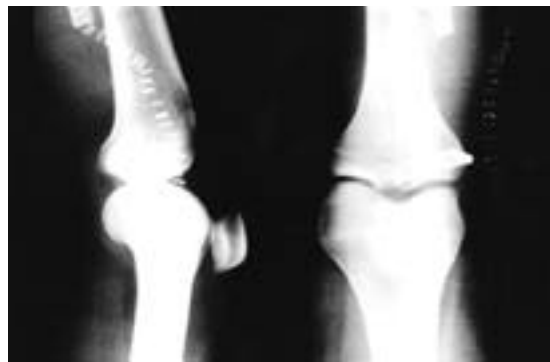


Fig. 6. Postoperative plain radiographs following en block resection and fibula collateral ligament reconstruction with non absorbable suture and staple.

23 (21 29) 20
 1 4 (Table 1).
 가
 2) 7 (2 가 1
 3 2

Table 1. Patient data

Case	Age/Sex	Side	Operation method	Biopsy result	Stage	Follow up after operation(years)	Complication
1	21/F	Rt	EBR* and LCL [†] reconstruction	GCT [‡]	II	3	
2	21/F	L	EBR and LCL reconstruction	GCT	II	1.2	
3	22/M	Rt	EBR and LCL reconstruction	GCT	III	1.3	Temporary peroneal nerve palsy
4	22/F	Lt	EBR and LCL reconstruction	GCT	III	2	
5	29/F	Rt	EBR and LCL reconstruction	GCT	II	5	

* En bloc resection, [†]Lateral collateral ligament, [‡]Giant cell tumor

(intraosseous expansion) 가 ^{2,4,6,7,8)} .

T1 (low signal intensity) T2 (high signal intensity) 가 Mankin⁹⁾ .

Technetium-99 m (long tubular bone) 가 .

1 (foot) 4 25% drop가 5 2.2 5 .

20 . 1 (intraosseous expansion) 가 , wide margin

(stage) 가 (en bloc resection) therapy) (local adjuvant therapy) 가 가 (expandable site) 1 가 ⁶⁾ 5 , , (

가

. Gitelies⁴⁾

2

3

5

가

5

1

2.2 (1.1 5)

가

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가 (reactive pseudocapsule)

가

²⁾.

(isometric point)

□ (staple)

1

. 5 1

4

12

. Faezypour²⁾

가

Abstract

Giant Cell Tumor of the Proximal Fibula Treated by En Bloc Resection

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Purpose: To report our experiences of clinical features, treatment method and results of giant cell tumor of 5 patients in proximal fibula.

Materials and Methods: Five patients managed with an en bloc resection preserving common peroneal nerve and lateral collateral ligament reconstruction with biceps femoris tendon followed up between January 1997 and July 2001. Preoperative plain radiograph and MRI and bone scan were checked. The recurrence of the tumor was judged by plain radiograph and clinical signs. Lateral instability of knee joint was checked during the outpatient follow-up.

Results: The mean age of the patients at the time of operation was twenty- three (21-29). There were one male and four female patients. Dull pain was main symptom and palpable mass was seen in two patients. Peroneal nerve palsy and local recurrence were not observed except one case of temporary peroneal nerve palsy. During the outpatient follow up, one among 5 patients showed slight lateral instability and the other 4 patients showed no instability.

Conclusion: Giant cell tumor in proximal fibula managed with an en bloc resection preserving common peroneal nerve and lateral collateral ligament reconstruction with biceps femoris tendon showed favorable results.

Key Words: Giant cell tumor, Proximal fibula, En bloc resection

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