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= Abstract =

## **Osteochondral Avulsion Fracture in Patella after Treatment of Abscess around Knee - A Case report -**

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Osteochondral avulsion fracture of patella has been rarely reported. We experienced one case of osteochondral avulsion fracture which was developed after abscess around knee.

The patient was a 16year old with the history of abscess.

The presenting symptom was knee pain and loss of extension power.

Radiologic and operative findings suggested that osteochondral avulsion fracture of the patella, was caused by minor trauma near the insertion site of quadriceps tendon.

In usual case of quadriceps tendon rupture, the rupture occurred at the musculotendinous junction, caused by sudden contracture of the muscle without trauma history.

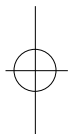
This case was treated successfully with tension band wiring technique.

Differential diagnosis between osteochondral avulsion fracture and osteomyelitis of patella

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237 (400-130)

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was emphasized.

**Key Words :** osteochondral avulsion fracture of patella, abscess around knee, K-wire and tension band wiring

6400/mm<sup>3</sup>

20mm/R, C-

2

37o,

가 4900/mm<sup>3</sup>

28mm/h, C-

(Fig 3)

2,4,7,10)

T1 weighted image  
weighted image signal 가

signal , T2  
Gd-DTPA

16

(Fig 3)

가

, C-

17

16

2

2

가

38

5 × 3 × 3cm

Group A streptococcus가

가 17800/mm<sup>3</sup>

30mm/h 가 . C-

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ASO Titer 400 IU / ml

2

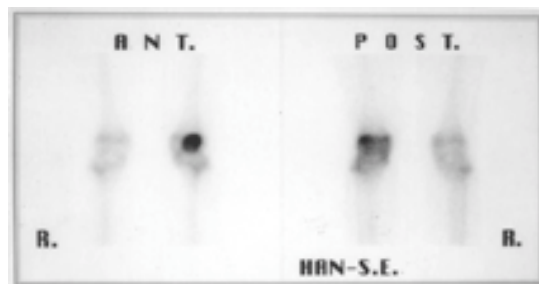
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**Fig 1.** Radiograph of the knee joint of 16 year old woman who had been operated for osteochondral avulsion fracture.



**Fig 2.** MRI (T2WI), abnormal high signal intensity is noted arrow at the upper margin of the patella.  
Osteochondral avulsion fracture was confused with osteomyelitis.



**Fig 3.** Whole body bone scan shows uptake on right patella abnormal hot.

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. Milgram<sup>8)</sup>

tension band  
(Fig 1).

6

Rorabeck Bobeck<sup>11)</sup>  
5%

10

Karfer<sup>6)</sup>

가

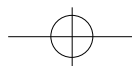
1).

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(Fig 3).



- (Fig 2).
- Ackroyd<sup>5)</sup>
- Weber<sup>12)</sup>
- 가
- Curtis<sup>3)</sup>
- K-
- tension band
- 1) , : 33 : 191-195, 1998.
- 2) **Bhole R, Frynn JC and Marbury Tc** : Quadricaept tendon tupture in uremia. *Clin Orthop*, 195 : 200-206, 1985.
- 3) **Curtis MJ** : Internal fixation for fractures of the patella : a comparison of two methods, *J Bone Joint Surg*, 72-B ; 280, 1990.
- 4) **Finlayson GR, Smith JG and Moore MJ** : Effects of the chronic acidosis on connective tissue *JAMA*, 187 : 659-662, 1964.
- 5) **Honghton GR, Ackroyd CE** : Sleeve fractures of the patella in children : a report of three cases, *J Bone Joint Surg*, 61-B : 165, 1979.
- 6) **Kaufer H** : Mechanical function of the patella, *J Bone Joint Surg* 53A : 1551-1560, 1971.
- 7) **Kurer MH, Baillod RA and Madgwick CA** : Musculoskeletal manifestation of amyloidosis, *J Bone Joint Surg*, 73-B : 271-276, 1991.
- 8) **Milgram JE** : Tangential osteochondral fracture of the patella, *J Bone Joint Surg*, 25 : 271, 1943.
- 9) **Preston ET** : Avulsion of both quadriceps tendon in hyperparathyoidism. *JAMA*, 221 : 406-407, 1972.
- 10) **Rorabeck CH, Bobeckko WP** : Acute dislocation of the patella with osteochondral fracture : review of eighteen cases, *J Bone Joint Surg*, 58-B : 237, 1976.
- 11) **Weber, M.J., Janeck, C.J., McLeod, P., Nelson, C.L., and Thomposn, J.A.** : Efficacy of Various Froms of Fixation of Tranerse Fractures of the Patella. *J Bone Joint Surg*, 62A : 215-220, 1980.

## REFERENCES

1) , : 33 : 191-195, 1998.