

1

2

3

: 가

:

22 8 5 6 2
 가 3
 (n=3, 38%) (n=8, 100%), (n=8, 100%)
 (n=2, 25%) (n=5, 63%)
 (38%) 7 (88%) (n=1, 13%) 3
 marthrosis) (lipohe-
 (n=8, 100%), (n=1, 13%) (medial patellar retinaculum)
 7 (88%) (n=2, 25%)

2-3%

(patellofemoral anatomy)

5, 6).

가

(1,

가
4),

가 가 (1-
(5).

가

(6).

가

(spontaneous reduction)

1997 11 1999 11

25 - 50%

(valgus - flexion - external rotation)

8

1
 2
 3
 2001 5 31 2001 8 6
 34 (22.4) (Table 1).
 가, 가, 14 -

1 7 skyline view
 Merchant view
 7
 8 5
 1 - 150 (36.4)

echo T2* (500 - 650/10 - 20, 20 - 25 ° flip angle)
 T1
 parameter 가 3 - 4 mm, matrix
 number가 137 × 256 151 × 256 가
 14 - 15 cm 가

1.5 - T Signa (GE Medical Systems, Milwaukee, WI, U.S.A.) Magnetom Vision (Siemens, Erlangen, Germany)

T1 (TR=500 - 650 msec/TE=10 - 20 msec)
 T2 (3000 - 4000/90 - 110) (3000 - 4000/10 - 20)
 , 7 gradient

(bone contusion) 8 (100%)
 (lateral femoral condyle)
 (medial facet of patella) (Fig. 1),
 3 (lateral tibial plateau)

Table 1. Clinical Information of the Patients With Traumatic Transient Lateral Dislocation of the Patella

Patient No.	Age/Sex	Trauma history	Past history on knee	Treatment
1	21/M	fall down	-	conservative
2	22/M	basketball	-	arthroscopic
3	30/M	ski	-	conservative
4	14/M	ski	-	conservative
5	28/M	ski	fracture & dislocation	conservative
6	15/M	basketball	-	arthroscopic
7	15/F	fall down	-	conservative
8	34/F	fall down	knee effusion	arthroscopic

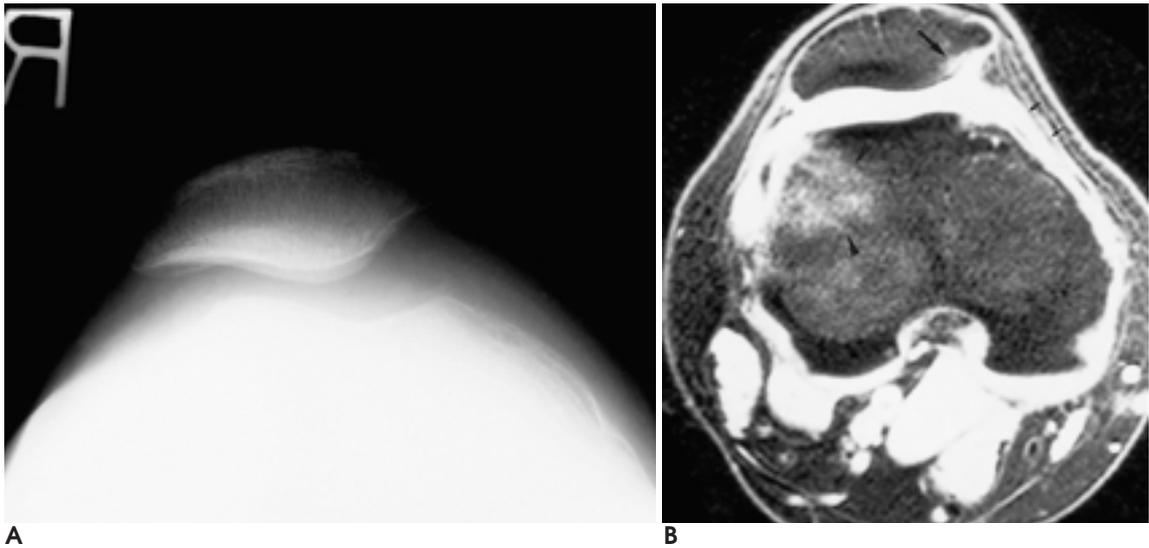


Fig. 1. A 15-year-old boy with trauma on right knee during basketball game.
A. Merchant view shows lateral subluxation of the patella without fracture.
B. In T2*-weighted axial image, there are mottled high signal intensities on medial facet of patella with chondral defect (arrow) and on lateral femoral condyle (arrowheads), suggestive of bone contusions. Normal feature of medial patellar retinaculum is obliterated (two small arrows), suggestive of injury.

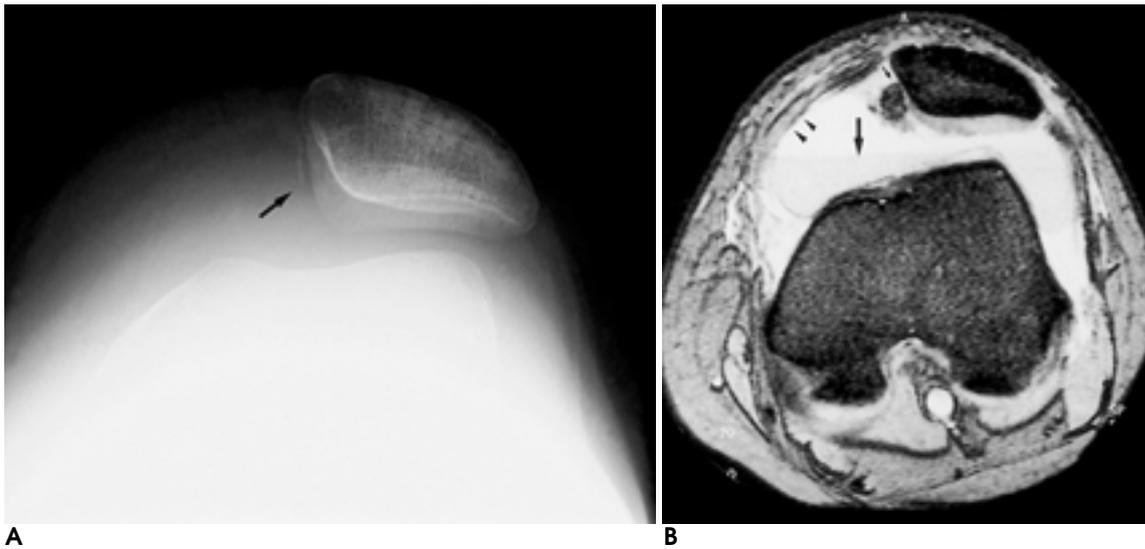


Fig. 2. A 15-year-old girl with trauma on left knee by fall down.
A. Merchant view reveals lateral subluxation of the patella and a thin bone fragment (arrow) from medial facet of patella by fracture.
B. T2*-weighted axial image shows a bone fragment (small arrow) and hemarthrosis with fluid-fluid level (large arrow). Normal feature of medial patellar retinaculum is obliterated (arrowheads), suggestive of injury. Bone contusion is noted in medial facet of patella and lateral femoral condyle in other images (not shown here).

가 가

5 (63%)
 (Fig.

1). 3 (38%) 2 (7 - 10).
 1 (Fig. 2).
 3 (38%) (10).
 (suprapatellar bursa), (inter - (quadriceps femoris)
 condylar notch), (vastus medi -
 7 (88%) 3 alis)
 (Fig. 2). (genu valgum), (lateral femoral
 8 (100%) 8 condyle), (external tibial tor -
 (medial patellar retinaculum) sion), (patellar tendon) (6).
 (Figs. 1, 2), gradient echo 가
 T2* 가
 2 , 1
 7 (88%) (Figs. 1, 2).
 (valgus - flexion - external rotation)
 (twisting motion), (valgus stress),
 가 가 ,
 (1, 2, 5, 11).
 2 - 3% 가 가 가
 가 가 가
 가 (1 - 4, 7 - 9). 가 (1, 2, 5),
 8
 413

(1, 2, 5) 8 가

가 가

가 (1, 2).

(trochlea groove)

가 (2).

가 5 3 7

가

(1, 2),

가

(12) 가 Yao

, Vallet (13) 6 - 12

가

(6).

3 가 가 가

가 가 가

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MR Findings of Traumatic Transient Lateral Dislocation of the Patellae¹

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Purpose: To determine the magnetic resonance (MR) imaging characteristics of traumatic transient lateral dislocation of the patellae.

Materials and Methods: In eight patients (6 males, 2 females, mean age: 22.4 years) in whom transient lateral dislocation of the patella was diagnosed, the distinctive MR imaging findings reflecting known injury mechanism were retrospectively analyzed with regard to bone contusion, chondral defect, fracture, loose body, joint effusion, and the associated soft tissue abnormalities.

Results: All of eight patients had bone contusions in the lateral femoral condyle and medial facet of the patella, while in five, chondral defects were present in this latter region. In three patients, fractures of the on lateral femoral condyle (n = 2) and medial facet of the patella (n = 3) were noted, and in three others, loose bodies were noted. Joint effusion [simple effusion (n = 4), lipohemarthrosis (n = 3)] was observed in seven patients, and associated soft tissue injuries [to the medial patellar retinaculum (n = 8), patellar tendon (n = 2), and anterior cruciate ligament (n = 1)] in eight. Patellar subluxation was found in seven.

Conclusion: MR imaging is a useful technique for the diagnosis of traumatic lateral dislocation of the patella. The significant MR findings are bone contusion in the lateral femoral condyle and medial facet of the patella, chondral defect, fracture, joint effusion, injury to the medial patellar retinaculum, and patellar subluxation.

Index words : Knee, injuries
Knee, MR
Patella

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