

Legg - Calvé - Perthes

: 1 1

Legg - Calvé - Perthes(LCP)

6 1
가

1

Legg - Calvé - Perthes(LCP)

(1, 2).

(Fig. 1D).

가

T1
T2

(1 - 8).

6

1

6

가

T2

1

가

(Fig. 2A). 2

T2

가

(Fig. 2B). 3

가

T1

(Fig. 3A), T2

(Fig. 3B)

가

(Fig. 3C)

4

가

5

T1

T2

5

T1

가

T2

(Fig. 4).

7

(Fig. 5A),

T1

(Fig. 5B) T2

T1,T2

(Fig. 1C),

(Fig. 1B), T2

가

T1

가

LCP

1.5 cm

(Fig. 1A).

5

가 10

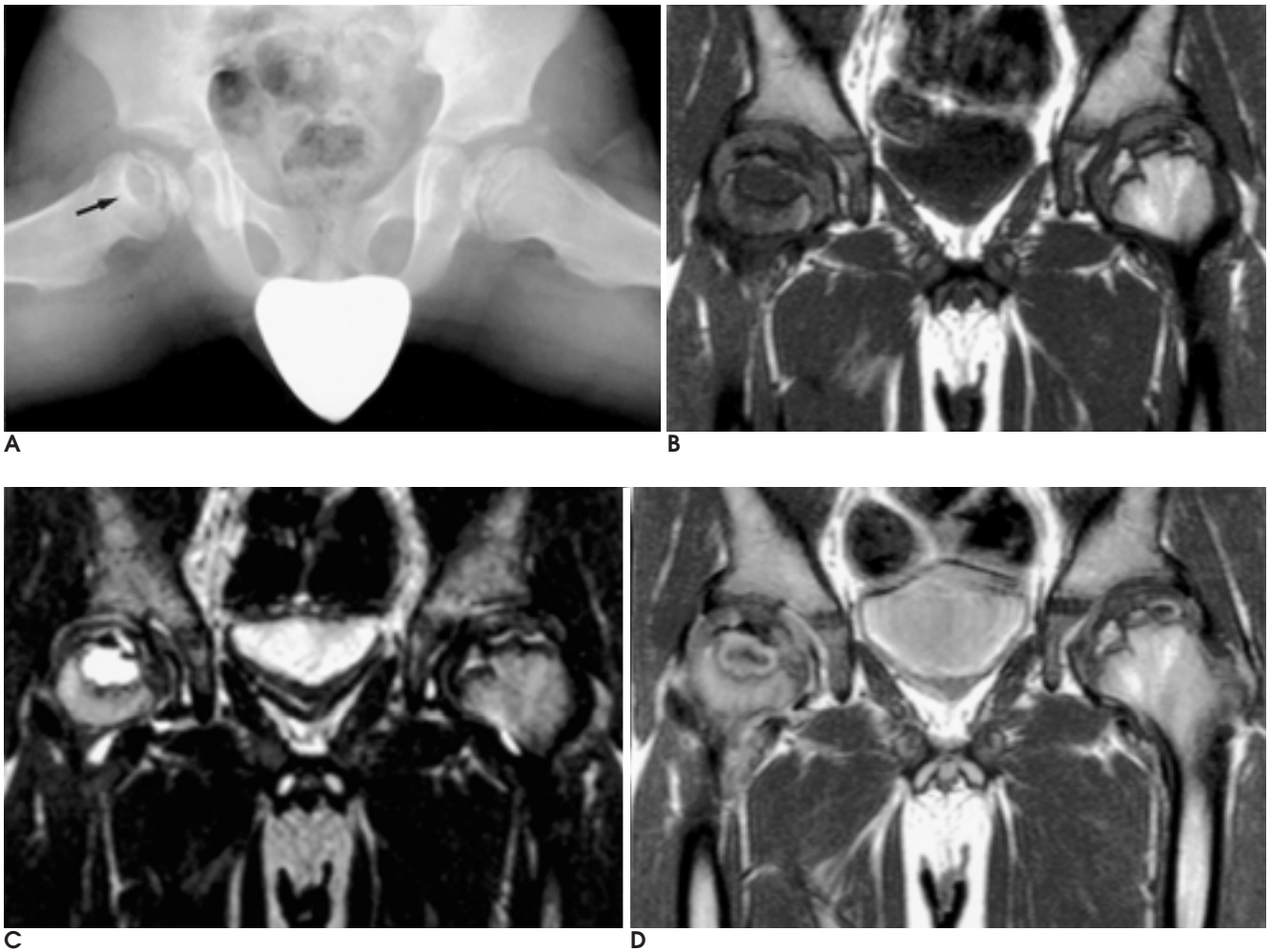


Fig. 1. Initial MRI of a metaphyseal cyst in a 5-year old male.

A. Plain radiograph shows a 1.5 cm sized well marginated round radiolucent cyst (arrow) in the metaphysis of the right femur with flattening and sclerosis of both femoral heads.

B, C, D. Metaphyseal cyst shows a round homogeneous low-signal-intensity on T1-weighted image (B) and a homogeneous high-signal-intensity on T2-weighted image (C) and a peripheral rim enhancement on the Gd-enhanced T1-weighted image (D). There is a bone marrow edema around the cyst.

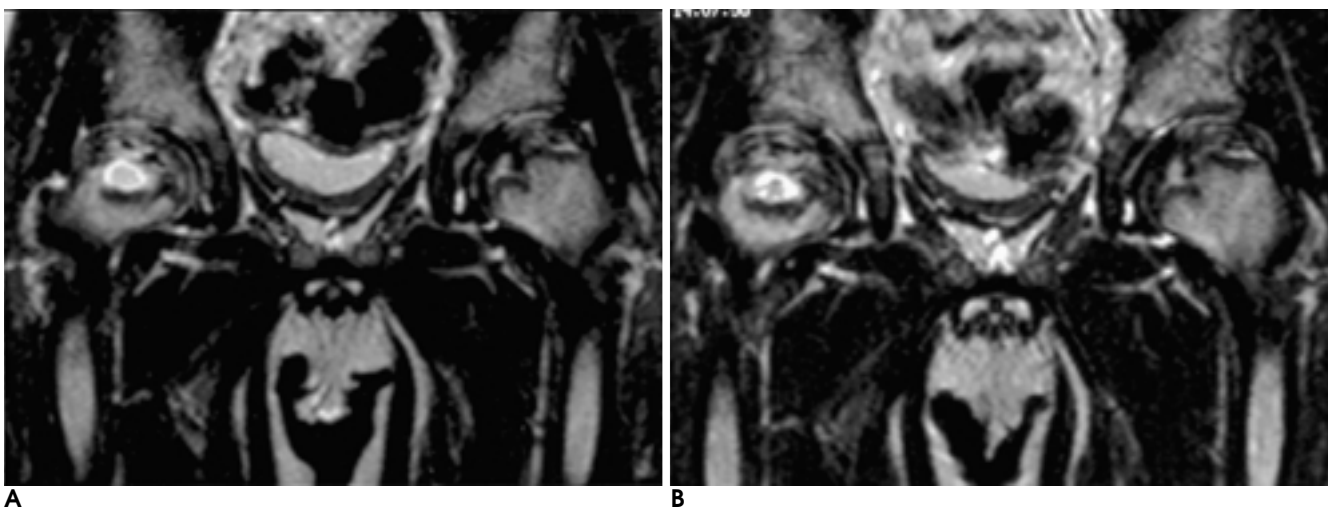


Fig. 2. Follow up MRI after 1 and 2 months.

A, B. The homogeneous high-signal-intensity on the initial study is changed into a round iso-signal-intensity lesion in the central portion after 1 month (A) and star shaped iso-signal-intensity lesion on T2-Weighted image after 2 months (B).

LCP

(premature physal close)
가 (3). LCP

(4-8),

. Carrolle (7)
T1 , T2

, Hoffinger (5) T2
가

, Johnson (8)

T1 , T2

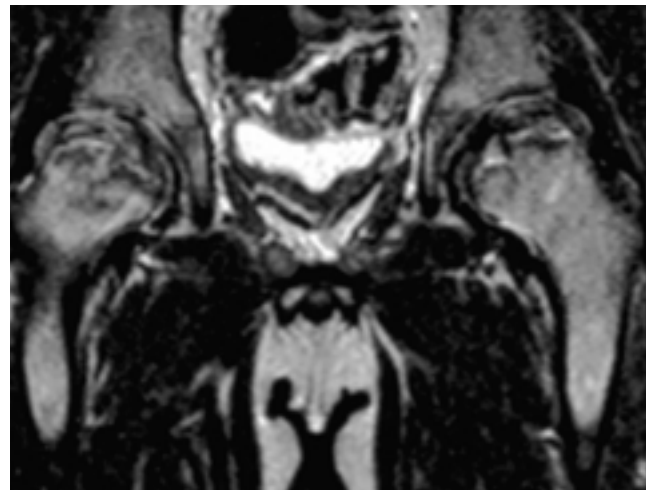
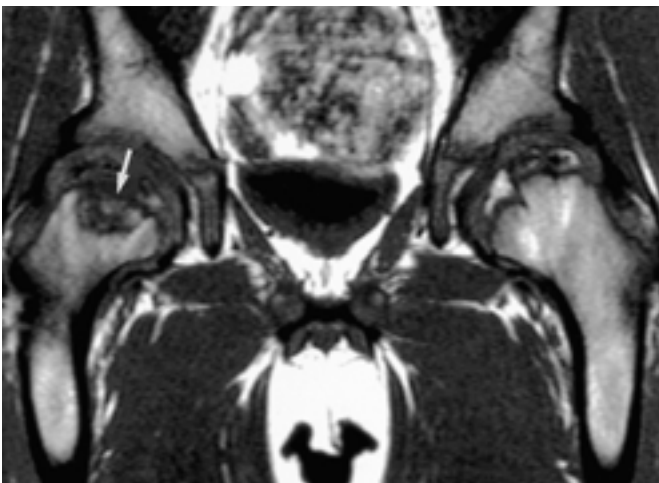
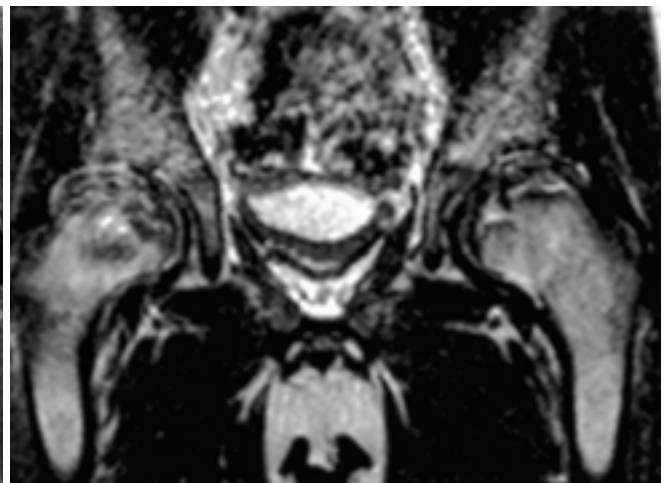


Fig. 4. Follow up MRI after 5 months.

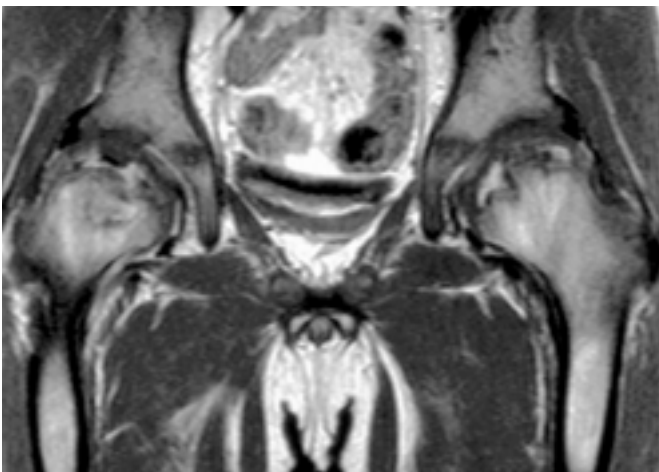
The high signal spots disappear and the central portion of the cyst shows an iso-signal-intensity with a linear low-signal-intensity band on the T2-weighted image.



A



B



C

Fig. 3. Follow up MRI after 3 months.

A. T1-weighted image shows high-signal-intensity nodules in the cyst periphery (arrow), which suggests new bone formation.

B. The central portion of the cyst shows a heterogeneous iso-signal-intensity with high signal spots on the T2-Weighted image.

C. The Gd-enhanced T1-weighted image shows homogeneous strong enhancement.

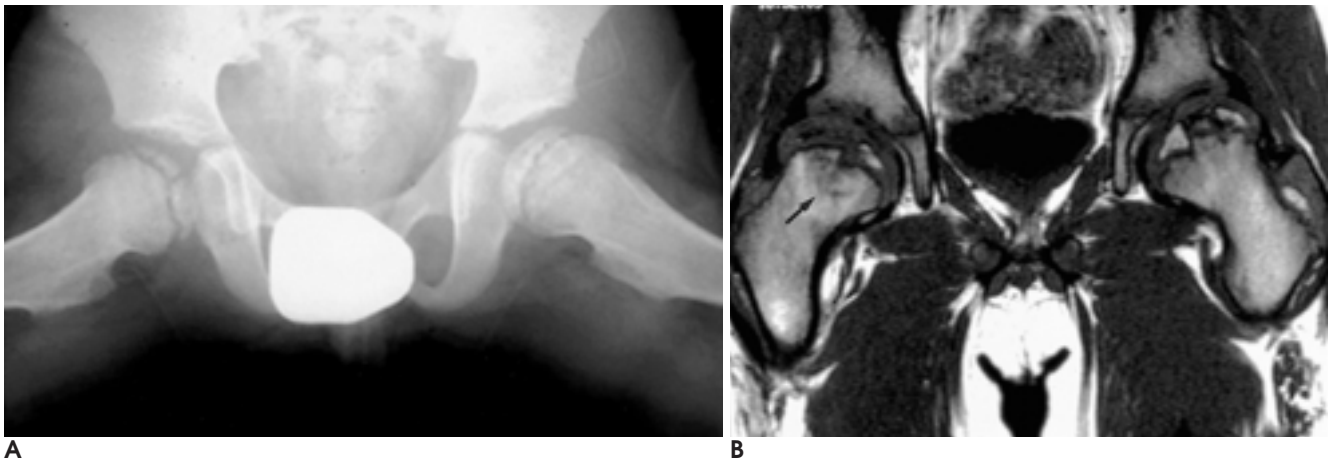


Fig. 5. Follow up MRI after 7 months.

A. The metaphyseal cyst is not shown on the plain radiograph.

B. The T1-weighted image shows that the metaphyseal cyst is changed into normal bone marrow with a faint cyst wall (arrow).

1 가 T2
2 T2
3 T2
가
3 5 T1
가
(5, 8).
3
T1
4, 5
7 가
1 가
T1

LCP

7

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Serial MR findings of Metaphyseal Cyst in Legg-Calvé-Perthes Disease: A Case Report¹

Chang Min Shim, M.D., Jae Boem Na, M.D., Haeng Jin Moon, M.D.

¹*Department of Diagnostic Radiology, Gyeongsang National University, College of Medicine*

Metaphyseal cysts are common findings in Legg-Calvé-Perthes(LCP) disease, though usually disappear within 6 - 12 months. Several studies have described the MR imaging findings of these cysts, though serial MRI findings have not been documented. In this report, therefore, we report the serial MRI results of metaphyseal cyst in LCP patients.

Index words : Femur, necrosis
Children, skeletal system
Hip, MR

Address reprint requests to : Jae Boem Na, M.D., Department of Diagnostic Radiology, Gyeongsang National University Hospital
90 Chilam-dong, Chinju 660-702, Korea.
Tel. 82-55-750-8211 Fax. 82-55-758-1568