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 6),<sup>3)</sup>,<sup>1,10)</sup>,  
<sup>1,10)</sup>,<sup>5)</sup>

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9



**Fig. 1.** Radiographs of a twelve years of age boy. **(A)** Anteroposterior radiograph of right knee shows osteochondroma on distal femur. **(B)** MRI shows tear of lateral discoid meniscus.

## REFERENCES

- 1) **Bottner F, Rodl R, Kordish I, Winkleman W, Gosheger G and Lindner N:** Surgical treatment of symptomatic osteochondroma. *J Bone Joint Surg*, 85-B:1161-1165, 2003.
- 2) **Bowen JR and Schmidt T:** Osteochondroma of the femoral neck in Perthes disease. *J Pediatr Orthop*, 3(1):28-30, 1983.
- 3) **Carpintero P, León F, Zafra M, Montero M and Berral FJ:** Fractures of osteochondroma during physical exercise. *Am J Sports Med*, 31:1003-1006, 2003.
- 4) **Cates HE and Burgess RC:** Incidence of brachydactyly and hand exostosis in hereditary multiple exostosis. *J Hand Surg*, 16-A:127-132, 1991.
- 5) **Dahlin DC and Unni KK:** Osteochondroma. In : Bone tumors. Springfield IL, *Charles C Thomas*, 18-32, 1986.
- 6) **Fraser RK, Natrass GR, Chow CW and Cole WG:** Pes anserinus syndrome due to solitary tibial spurs and osteochondromas. *J Pediatr Orthop*, 16:247-248, 1996.
- 7) **Gozdasoglu S, Uysal Z, Kurekci AE, et al:** Hereditary multiple exostoses and acute myeloid leukemia: an unusual association. *Pediatr Hematol Oncol*, 17(8):707-711, 2000.
- 8) **Katz JF:** Osteochondroma of the neck of the femur in Legg-Calvé-Perthes disease. Report of two cases. *Clin Orthop*, 68:50-54, 1970.
- 9) **Katz JF:** Legg-Calvé-Perthes disease associated with hereditary multiple exostosis: a case report. *Mt Sinai J Med*, 45(1):46-53, 1978.
- 10) **Lee HK, Lee SH, Lee YI, Kim HS and Park JY:** Clinical experience of osteochondroma. *J Kor Orthop Assoc*, 29:377-385, 1994.
- 11) **Mehta M, White LM, Knapp T, Kandel RA, Wunder JS and Bell RS:** MR imaging of symptomatic osteochondromas with pathologic correlation. *Skeletal Radiol*, 27:427-433, 1998.
- 12) **Ölmez N, Gunaydin R, Gúrgan A and Elcin F:** Coexistence of hereditary multiple exostosis and ankylosing spondylitis. *Clin Rheumatol*, 18:481-484, 1999.
- 13) **Rosbotham JL, Trembath RC, Glover M, Leigh I and Barker JN:** An association between psoriasis and hereditary multiple exostoses. A clue for the mapping of a psoriasis susceptibility gene?. *Br J Dermatol*, 130(5):671-674, 1994.
- 14) **Tsai CY, Yu CL, Tsai YY, Wu TH and Tsai ST:** Osteochondroma in a patient with juvenile ankylosing spondylitis associated with idiopathic thrombocytopenic purpura and thalassemia. *Scand J Rheumatol*, 25:61-62, 1991.

## Coexistence of Osteochondroma around the Knee and Internal Derangement of Knee

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**Purpose:** To find out the pathologic symptoms, and the incidence and clinical significance of the coexistence of internal derangement of knee(IDOK) in osteochondroma around the knee.

**Materials and Methods:** We retrospectively reviewed forty-five patients under 20 years of age treated with the excision of the osteochondroma around the knee between 1995 and 2004. We analyzed age, gender, past history, family history, solitary or multiple osteochondroma, presenting pathologic symptoms, and causes of IDOK.

**Results:** IDOK was confirmed in nine(20%) among the 45 cases. There were four cases of multiple osteochondromatosis, and IDOK was coexisted in one case among them. The most common presenting pathologic symptoms were painless mass of 38 cases, however 9 cases among them had joint pain for IDOK. There were 7 cases of meniscal tears and 2 of pathologic plica. Discoid meniscus was found in 4 cases among the 7 cases of meniscal tears.

**Conclusion:** Coexistence of osteochondroma around knee and IDOK in this study probably represents a coincidence rather than a real association. However the incidence might be not low, special study and close observation should be done.

**Key Words:** Around the knee, Osteochondroma, Internal derangement of knee

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