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- Abstract -

Deep Benign Fibrous Histiocytoma of the Knee - A Case Report-

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Benign fibrous histiocytoma is characteristically composed of fibroblastic and histiocytic cells. Most commonly, this tumor occurs in the dermis and superficial subcutis, but it is uncommon in the knee. We experienced a case of deep benign fibrohistiocytoma in a 38-year-old woman who complained of palpable tender mass on the medial aspect of the right knee. MR imaging findings included a well-delineated oval mass with low signal intensity on T1-weighted and high-signal intensity of T2-weighted images, as well as a marked peripheral contrast enhancement. Histopathologically, the lesion contained a mixture of fibroblastic and histiocytic cells that were often arranged in a cartwheel or storiform pattern and accompanied by varying numbers of inflammatory cells, foam cells, and siderophages. After surgical removal of the lesion, no recurrence was observed.

Key Words : Benign fibrous histiocytoma, Knee

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(benign fibrous histiocytoma)

(Fig. 2-A,B).

5%

(benign fibrous histiocytoma) (dermis) (superficial subcutis) (cutaneous benign fibrous histiocytoma)

1

(deep benign fibrous histiocytoma) ^{4,6,10,11}

38 가 10

(fibrous xanthoma), (xanthofibroma), (sclerosing hemangioma), (giant cell tumors of tendon sheath origin),

3

(benign synovioma), (pigmented nodular synovitis), (nodular tenosynovitis)

T1

contrast enhancement)

(peripheral (Fig. 1-A,B,C). (infrapatella fat

^{4-7,10,11}

pad)

2×2×1cm

5%

, 20~40

^{4,10}

가

가



Fig. 1. Rt. knee MRI; The ovoid masslike lesion in the infrapatellar fat pad area, shows isointense on sagittal SE T1-weighted image (A), heterogeneously hyperintense sagittal SE T2-weighted image (B), and contrast enhancement with focal noncontrast enhancing portion (C).

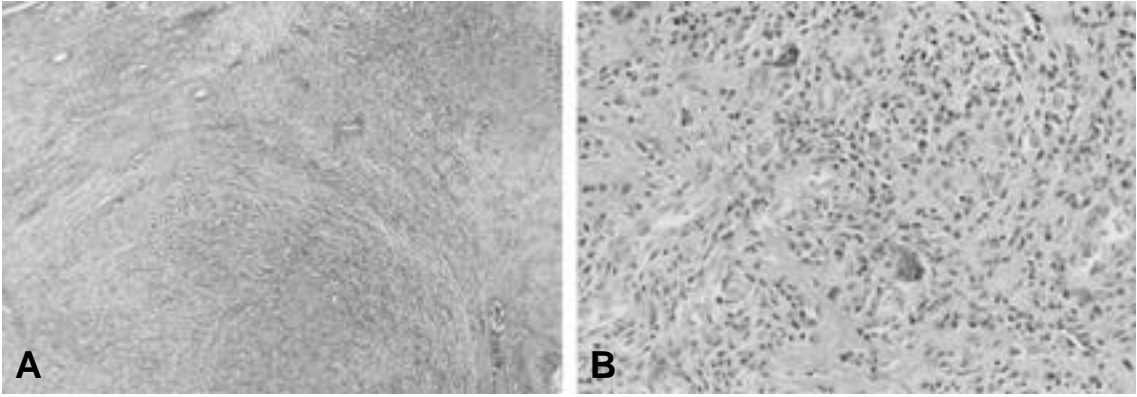


Fig. 2. Microscopic finding of a benign fibrous histiocytoma. **A.** Characteristically most are composed of spindle cells arranged in fascicular form and round histiocyte like cells(H & E, ×40). **B.** These have a more distinct storiform pattern but lack the variety of secondary elements such as xanthoma cells and siderophages(H & E, ×200).

1,4-7,10,11) (Fig. 1-

A,B).

70%

, T1, T2

5-7,10,11)

mm

cm

, T1

T2

2 ~ 12cm

5cm

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(peripheral contrast enhancement)

2,7)(Fig. 2-A,B).

4,10)

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(multifocal factor)

(giant cell tumor of tendon sheath)

(synovial sarcoma), (ganglion cyst),

(xanthoma tendinosum),

(fibroma of tendon sheath), (dig-

ital mucous cyst), , ,

5,7,11)

가

30 ~ 50

가

가

(pseudogland)

가

가

1,3-7,10,11)

가 ,

17 ~ 48%

가

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REFERENCES

- 1) **Azouz EM** : Benign fibrous histiocytoma of the proximal tibial epiphysis in a 12-year-old girl. *Skeletal Radiol*, 24:375-378, 1995.
- 2) **De Beuckeleer L, De Schepper A, De Belder F, Van Goethem J, Marques MC, Breckx J, Verstraete K and Vermault F** : Magnetic resonance imaging of localized giant cell tumor of the tendon sheath. *Eur Radiol*, 7(2):198-201, 1997.
- 3) **Enzinger FM and Weiss SW** : *Soft tissue tumors*. 3rd ed. St. Louis, Mosbey; 735-742, 1995.
- 4) **Juan R** : *Ackerman's surgical pathology*. 8th ed. Mosby ; 1997-2000, 2036-2038, 1996.
- 5) **Jun IS, Kim NI and Haw CR** : A case of Giant cell tumor of the tendon sheath. *J of Korean Dermatology*. 32:939-943, 1994.
- 6) **Ha KI, Han SH, Jung MY, Yang BG and Ryu JH** : A case of benign fibrohytiocytoma in the knee joint. *J of Korean Knee Joint*, 5:222-224, 1993.
- 7) **Lee HP, Park HJ, Park YH and Kim JW** : A case of Giant cell tumor of the tendon sheath, *J of Korean Dermatology*. 33:1168-1171, 1995.
- 8) **Machiel F, Maeseneer MD, Chaskis C, Bourgain C and Osteaux M** : Deep benign fibrous histiocytoma of the knee : CT and MR features with pathologic correlation. *Eur Radiol*, 8:989-991, 1998.
- 9) **Rodrigues C, Desai S and Chinoy R** : Giant cell tumor of the tendon sheath. A retrospective study of 28 cases. *J Surg Oncol*, 68:100-103, 1998.
- 10) **Ushijima M, Hashimoto H, Tsuneyoshi M and Enjoji M** : Giant cell tumor of the tendon sheath (nodular tenosynovitis). A study of 207 cases to compare the large joint group with the common digit group. *Cancer*, 57:875-884, 1986.
- 11) **Yi KJ, Kim YS and Oh CH** : A case of Giant Cell Tumor of tendon sheath: *J of Korean Dermatology*. 31:416-420, 1993.