

Primary tumors of the patella

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Patellanın primer tümörleri

Bu çalışmada 4 primer patella tümörü sunmaktayız. Ortalama takip süresi 6.1 yıldır. 2 kemik kisti, küretaj ve kemik greft ile 1 osteokondrom eksizyon ile ve 1 synovial sarkom patellektomi ile tedavi edildi. Hiç bir olguda son kontrolde rekürrens yoktu ve fonksiyonel sonuç mükemmeldi.

Anahtar kelimeler: Primer kemik tümörü, patella

Primary tumors of the patella

In this study, we report 4 primary tumors of the patella with a mean follow-up of 6.1 years. Curettage and bone grafting was done for 2 bone cysts, 1 osteochondroma was excised and patellectomy was done for 1 synovial sarcoma. There is no recurrence and the results were functionally excellent.

Keywords: Primary bone tumors, patella

The literature shows that the most common tumor of the patella is benign tumors; the malignant ones are rare (7). The frequently seen benign tumor of the patella is the giant cell tumor. Other ones are simple bone cyst, aneurysmal bone cyst and haemangioma. Total patellectomy can be applied at the stage IA and IIA malignant tumors of the patella (1).

Patients and methods

In this study, four primary tumors of the patella are reported, which were seen between the years of 1980-1993. Patients were followed up 3 to 10 years, and the mean follow up was 6.1 years.

Two of the cases were bone cysts, curettage and bone grafting was applied. The other case was osteochondroma of the patella and was excised.

The fourth case was a 62 years old male. The presenting symptom was only the swelling at the right foot (25. 2. 1988). Roentgenograms of the right foot showed lytic lesion of navicular bone. Full body bone scan by Tc-99MDP showed pathologic absorption. Histopathological diagnosis by incisional biopsy was reported as stage IA synovial sarcoma. 3000 Rad irradiation therapy was applied to the tumoral part of the right foot. He was referred back on 15. 6. 1988 with the complaint of pain and swelling at the left knee.

Roentgenograms and bone scan showed the same pathology at the left patella; this was thought as synovial sarcoma and arthroscopy was applied without biopsy.

Tumor was found intracompartmental arthroscopically, and patellectomy was applied. The defect in the quadriceps tendon was reconstructed by free fascia lata graft. Synovial sarcoma was verified histopathologically.

Results

At the final evaluation, all of patients were excellent functionally. There were no signs of recurrence and metastases.

Discussion

Primary tumors of the patella is relatively rare, and was reported as less than 1% of all primary bone tumors in the literature (4, 7). The earliest summary of primary tumors of the patella was reported by Cole in 1925 (Cit 1). Since then, there were sporadic case reports and different series of patellar tumors (1, 2, 3, 4, 5, 6, 7, 8).

Operation is not necessary in more than 90% of patients with simple bone cysts (8). In the past, these cysts were treated by curettage and bone grafting (8). By this technique, the incidence of recurrence was found to be 20 to 30% (8). This type of surgery was practically disappeared since the introduction of nonsurgical treatment with the infiltration of methylprednisolone acetate (8). Generally bone cysts were seen at the metaphyses of the long bones. In our case tumor was seen at the subchondral bone. In order to protect the intraarticular bone and articular surface, surgical treatment was chosen. The mean follow up was 8 years of the patients. At the end of this period there was no sign of recurrence.

In most cases, it is not necessary to remove the osteochondroma. Surgery is indicated only when the tumor causes symptoms and for cosmetic purposes (8). Excision of tumor was done for the knee pain in our case.

Synovial sarcoma has a high tendency to recur locally after conservative treatment. The tendency of metastasis is also high, and this may be early or late. Wide resection must be applied, this may be wide

amputation also (8). According to these patellectomy was applied in our case. In the past 6 years there was no recurrence, and the patient was excellent functionally.

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