Clinical Image

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Superior-medial pole of the bipartate patella

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In December 2022, a 33-year-old male walked into our orthopedic outpatient clinic due to intermittent throbbing pain at the anterior side of the right knee that he had for the previous year. A physical examination revealed tenderness over the right knee with intact range of motion in the right lower limb and intact stability of the knee joint. In addition to bilateral leg early osteoarthritis found on radiographic examination, an accessory fragment, 0.5 cm in width and 0.9 cm in length, at the superior-medial pole in the left knee was incidentally found (Figure 1). A rare asymptomatic superior-medial pole bipartite patella in the left knee was impressed, which does not fall into the Saupe classification [1]. Conservative treatment with anti-inflammatory medication, activity modification, and physical therapy was suggested.

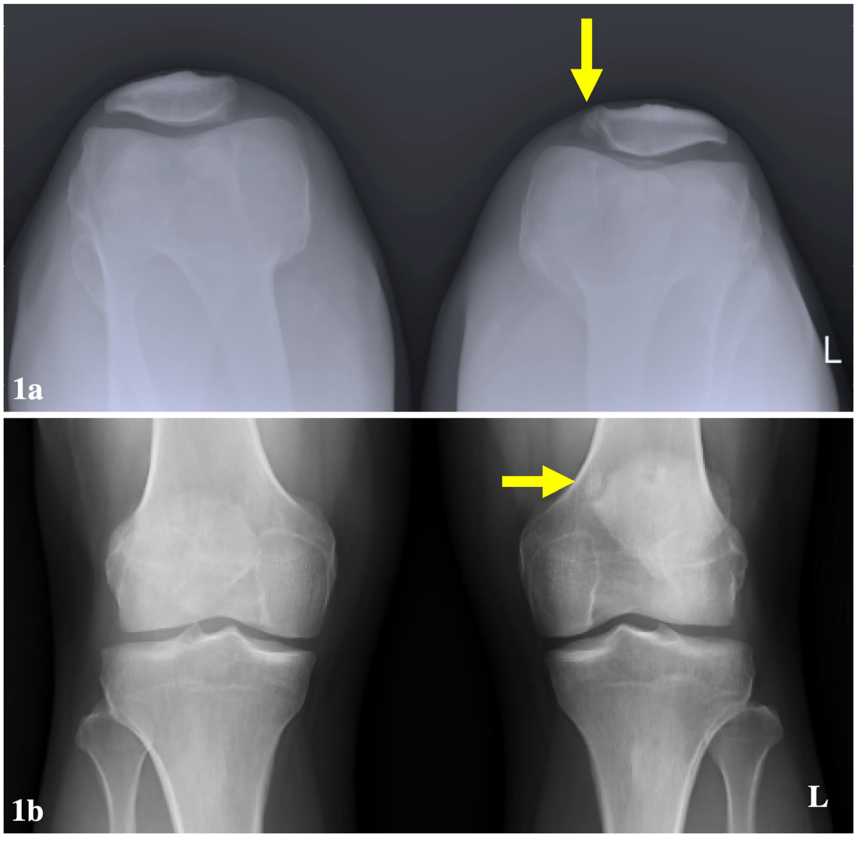

Figure 1: Plain-film radiograph images suggested that a fragment of 0.5 cm in width and 0.9 cm in length was found at the superior-medial pole of the patella in the left knee (yellow arrow). (A) Merchant view, and (B) anterior-posterior view.

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This patient's bipartite patella developed due to incomplete fusion of the ossification center, characterizing as a normal variant in approximately 1 % of the population [2, 3]. Bipartite patella is categorized by the Saupe classification based on the relative relationship between the unfused fragment and patella into three types: fragments at the inferior pole (5 % in population), fragments at the lateral pole (20 % in population), and fragments at superior lateral pole (75 % in population) [1]. This case is so unique that it does not fall into these three groups, and only two previous studies reported on the medial-pole bipartite patella in 5 decades [4, 5]. The main purpose of this report is to raise awareness of the medial-pole bipartite patella in the diagnosis of the bipartite patella. The medical management and rehabilitation program for the medial-pole bipartite patella, like other types of bipartite patella, should be tailored to the patient's symptoms.

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