Calcified chondral bodies may be present along with foci of hemosiderin deposition. MRI improves the accuracy of diagnosing low-grade chondrosarcomas and contributes only to the diagnostic workup of cases in which malignant transformation is suspected. The MR features of a low-grade chondrosarcoma are lobulated growth, high signal intensity (SI) on T2-W1, separated by low-SI on septa strong enhancement, and septal (ring and arc) enhancement.[9]

Bone scan of Tc-99m HmPDP imaging showed increased uptake around the amorphous lobulated calcified mass.[10] The ultrasound features of synovial chondromatosis include a well-circumscribed periarticular or intra-articular hypoechoic mass containing multiple echogenic foci, synovial membrane thickening, widening of the joint space, and secondary erosive and arthritic changes.[11]

Most authors believe that a synovial chondromatosis is a benign tumor, and malignant transformation is low. Davis, et al. reviewed 53 cases of synovial chondromatosis covering a period of 30 years. Nine patients suffered recurrence (15%) , including three that became malignant. This suggests that primary synovial chondromatosis has a significant potential for malignant change. A rapid increase in size of the lesion with a deteriorating clinical picture should provoke suspicion of malignant change. Useful histological criteria for diagnosing malignancy include the presence of atypical chondrocytes arranged in sheets diffusely scattered throughout the ground substance rather than arranged in nests, the presence of mitotic figures, and crowding and spindling of nuclei at the periphery of lobules.[12]

Treatment of synovial chondromatosis is controversial; many authors advise synovectomy and removal of the loose bodies either by arthroscopy or open operation.

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