



Natural course of intra-articular shifting bone marrow edema syndrome of the knee

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BACKGROUND: Intra-articular shift (migration) of [bone marrow edema](#) syndrome (BMES) is a very rare disease. Only a few cases have been reported thus far. The condition may cause the clinician to suspect an aggressive disease. **METHODS:** We reviewed eight patients (four women and four men) with unilateral BMES located in the knee. The patients were aged 39 to 56 years (mean, 49.2 years). In all patients, [bone marrow edema](#) (BME) initially observed on [magnetic resonance](#) imaging (MR imaging) shifted within the same joint, i.e. from the medial to the lateral femoral condyle or the adjacent bone. Seven patients were given conservative therapy, including limited weight-bearing, for a period of three weeks after the initial detection of BMES, whereas one patient underwent surgical core decompression twice. **RESULTS:** [MR imaging](#) showed complete restitution in 6 cases and a small residual edema in one case. A final control MR could not be obtained for one patient, who had no pain. A further patient had an avascular necrosis of the contralateral hip after 16 months. Improvement on [MR imaging](#) was correlated with the [clinical outcome](#) in all cases. All patients became asymptomatic after a mean period of 9 months (6–11). **INTERPRETATION:** Intra-articular shifting BMES is a very rare condition. As the disease is self-limiting, conservative therapy may be recommended.