

BAKER'S CYSTS IN KNEE OSTEOARTHRITIS: A MUSCULOSKELETAL ULTRASOUND STUDY

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BACKGROUND/AIMS: To investigate the prevalence of Baker's cyst in patients with primary painful knee osteoarthritis.

METHODS: Prospective clinical and musculoskeletal ultrasound (MUS) study in 150 patients with primary painful knee osteoarthritis diagnosed by ACR criteria. The relationship between the Baker's cyst and the variables joint effusion, synovitis, osteophytes and radiological degrees of Kellgren and Lawrence, were analysed. Chi-square test was used for statistical analysis.

RESULTS: Baker's cysts were demonstrated by MUS in 54 (21.2%) of 254 knees or 40 (26.7%) of 150 patients, 14 (25.0%) of whom had bilateral cysts. Only 18 (33.9%) of 54 cysts had been diagnosed clinically. The majority (83.3%) of cysts were small to medium-sized (<5 cm). One of the 54 cysts had ruptured. Joint effusion was detected in 59.8% of knees. Synovitis and osteophytes were detected in 30.3% and 48.8% of knees, respectively. There was a highly significant correlation between the presence of Baker's cyst with knee effusion and synovitis ($p < 0.001$ and $p < 0.001$, respectively). There was also a significant correlation between the presence of Baker's cyst with osteophytes and radiographic grade ($p < 0.01$ and $p < 0.05$, respectively).

DISCUSSION/CONCLUSIONS: The results indicate that Baker's cysts are common in knee OA, and that they may escape clinical detection. Therefore, MUS should be more widely employed by clinicians in the diagnosis of Baker's cysts, which may sometimes be accompanied by significant morbidity.

Key words: Baker's cyst, musculoskeletal ultrasound, knee osteoarthritis