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IMPORTANCE OF DIFFERENT IMAGING MODALITIES FOR DIAGNOSIS AND TREATMENT OF BAKERS CYST – CASE REPORT

Anaesthesiology

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ABSTRACT

Baker's cyst is a fluid filled sac which forms in the popliteal fossa present in the posterior aspect of the knee between medial head of gastrocnemius and semimembranosus. A 62yr old female presented with pain in the calf at night on and off followed by swelling of knee joint and leg. Patient had no relief in pain and pain increased in intensity in popliteal fossa with throbbing sensation in thigh and calf, no associated fever. Finally MRI was obtained which showed early OA changes, bony edema of medial tibial plateau, Bakers cyst and sprain of medial collateral ligament. Patient was treated with ultrasound guided aspiration of the Bakers cyst with infiltration of steroid into the cyst and patient was also injected with Hyaluronic acid (visco supplementation) in the suprapatellar recess for osteoarthritis. MRI remains to be gold standard and should be done done whenever Baker's cyst is suspected and ultrasound guided aspiration of cyst and steroid injection gives excellent pain relief for the treatment of Bakers cyst.

KEYWORDS

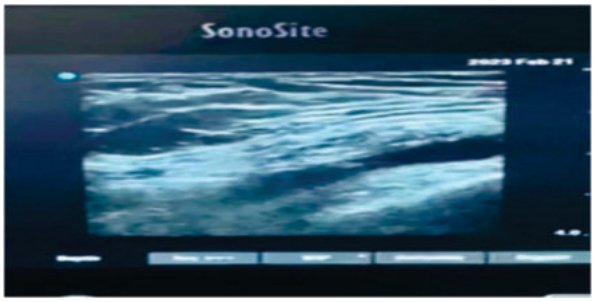
Baker's Cyst, Hyaluronic acid

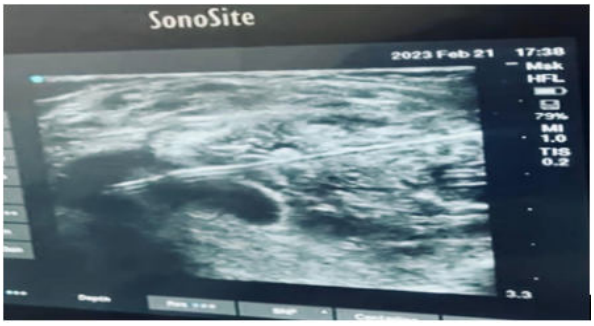
BACKGROUND:
Baker's cyst is a fluid filled sac which forms in the popliteal fossa present in the posterior aspect of the knee between medial head of gastrocnemius and semimembranosus.[1,2,3] Bakers cyst in adults is usually associated with degenerative conditions of the knee and mostly asymptomatic and incidental finding. One of the most common association is secondary degenerative meniscal tears. Bakers cyst are most frequently encountered in adults with a history of trauma.[4] Ultrasound guided aspiration of the cyst and steroid injection is an effective non invasive method for the treatment of Bakers cyst. This case report stresses the importance of MRI as a imaging modality for the diagnosis of Bakers cyst and also demonstrates the importance of ultrasound for the effective treatment of the same.

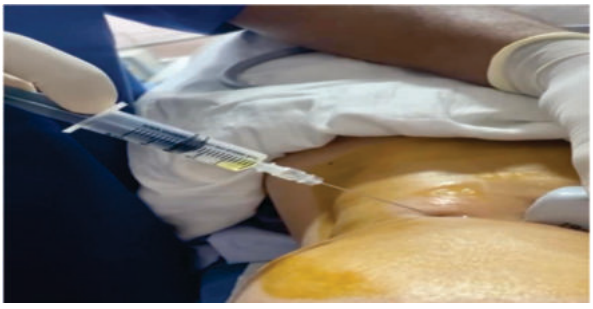
Case Report –
A 62yr old female presented with pain in the calf at night on and off followed by swelling of knee joint and leg. Patient has taken pain killers and had pain relief lasting only for the duration of action of the drug. Pain recurred once the effect of the drug was over and gradually developed tightness in leg and around the calf with decreased range of motion. Patient later had a ortho consult and advised x ray knee which showed grade 1 osteoarthritis and was advised NSAIDS and exercises. Patient had no relief in pain and pain increased in intensity in popliteal fossa with throbbing sensation in thigh and calf, no associated fever. Finally MRI was obtained.

MRI - Early OA changes of knee. Bone bruises/ edema of medial tibial plateau, Bakers cyst and sprain of medial collateral ligament.

RESULT-
Patient was treated with ultrasound guided aspiration of the Bakers cyst with infiltration of steroid into the cyst and patient was also injected with Hyaluronic acid(visco supplementation) in the suprapatellar recess for osteoarthritis. Patient had immediate and effective pain relief following the procedure and was pain free at 6months follow up.







- Differential diagnosis –

Abscess
AV fistula
DVT
Hemangioma
Hematoma
Lipoma
Lymphadenopathy
Malignancy

Bakers cyst is usually asymptomatic but if patients present with symptoms they should be evaluated and treated accordingly but patient should be explained that recurrence is a possibility. Outcomes are good in most of patients as the disorder is beningn.[5,6]

CONCLUSION –
MRI remains to be gold standard and should be done done whenever Bakers cyst is suspected and ultrasound guided aspiration of cyst and steroid injection gives excellent pain relief for the treatment of Bakers cyst.

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