Abstract: Sciatica is defined as pain experienced along the sciatic nerve distribution. Extraspinal pathology associated with symptoms and signs of sciatica are infrequent. We here by present such case of acetabular paralabral cyst causing sciatica in a 35 year old male with history of hip pain radiating to posterior aspect of thigh. On examination of spine, except for SLRT test others are normal. X-Ray of Lumbosacral Spine and Right hip and MRI lumbosacral spine was normal. A MRI pelvis with both hips was ordered to rule out hip and sacroiliac joint pathology and it revealed Right Acetabular Paralabral cyst impinging Right Sciatic Nerve. A diagnosis of right acetabular paralabral cyst with sciatic nerve compression was made. Through southern approach cyst was excised. Post operatively, the patient noted relief of pain. Started partial weight bearing at 3 weeks. At 2 year follow up the patient was comfortable without complaints. HPE consistent with Ganglion cyst. To our knowledge, Only three cases of such cysts causing sciatica have been reported in literature, hence this case need to be reported.

Keyword: acetabular paralabral cyst, sciatica, excision.

INTRODUCTION:
Sciatica is defined as pain experienced along the sciatic nerve distribution. It is most commonly caused by a herniated disc or spinal stenosis. Extraspinal pathology associated with symptoms and signs of sciatica are infrequent. Synovial cystic lesions are commonly found in large joints, such as the shoulder, knee, and hip. Such lesions, when occurring in the hip and shoulder joints, are often associated with labral tears and are known as labral or paralabral cysts according to their anatomical relationship with the joint. These cysts when occurring in hip may cause compression of sciatic or obturator nerve and produce pain. Only few cases of such cysts causing sciatica have been reported in literature, hence this case is reported.

Case Report:
A 35 years old gentleman, tailor by occupation presented with pain in posterior aspect of right hip radiating to posterior aspect of right thigh and leg for 3 months. Pain aggravated on sitting and lying on right side. Pain not relieved by medications.

Previous history of fall 1 year back which was trivial in nature. No history of RA, TB, DM, HT.

Clinical presentation:
His general condition is good. No localized spinal tenderness. SLRT was 80° bilaterally. FABER test was positive on Right Side. Power was normal in both lower limbs. Hip flexion, abduction and internal rotation are painful and not restricted. Blood investigations like ESR, CRP, RF, ASO, Serum Uric acid are normal. X-Ray of LS Spine and Right hip and MRI lumbosacral spine was normal. A MRI pelvis with both hips was ordered to rule out hip and sacroiliac joint pathology and it revealed Right Acetabular Paralabral cyst impinging Right Sciatic Nerve. No Labral tear.
MRI of the pelvis showing acetabular labral cyst in relation to sciatic nerve

Operative details:
A diagnosis of right acetabular paralabral cyst with sciatic nerve compression was made. Through posterior approach to right hip (Southern Approach), short external rotators identified and tagged. Cyst palpable over posterosuperior wall of acetabulum and capsule. Cyst dissected with pushers from surrounding capsule and Muscles. Cyst was excised in total after isolating sciatic nerve and pushed posterior along with short external rotators. No rent was present in capsule. Base cauterized. Cyst was opened and found to contain mucinous material and sent for HPE.

Photographs showing cyst dissected after isolating sciatic nerve

Post operatively, the patient noted relief of pain. Started weight bearing at 3 weeks. At 2 year follow up the patient was comfortable without complaints. HPE consistent with Ganglion cyst.

Discussion:
Paralabral Cyst arises from adjacent to acetabular labrum. Causes are Trauma, osteoarthritis, Rheumatoid arthritis, Acetabular dysplasia, Intra articular TB.

There are 2 types of cyst-Ganglion and synovial cyst. Ganglion cyst contains mucin, lined by flat spindle shaped cells. Arises from joint capsule, tendon sheath, bursae, subchondral bone. Synovial cyst is continuation from joint lined by synovial cells.
In the hip, tears of the labrum can cause loss of congruity Between the femoral head and the acetabulum, thus leading to Increased intra-articular pressure. This elevated pressure can Force synovial fluid into the acetabulum or the surrounding Soft tissues, causing a paralabral cyst. These cysts can produce Joint instability and pain. These cyst if situated anteriorty can cause compression to femoral nerve and vessels, obturator nerve and posterior to sciatic nerve. Nondiscogenic sciatica can be categorized as either intrapelvic or extrapelvic. Reports of intrapelvic causes include tumors, aneurysms, endometriosis, and anorectal abscesses. Extrapelvic causes (distal to the sciatic notch) include aneurysms Or pseudoaneurysms of the gluteal artery, tumor, gluteal abscess, and avulsion fracture of the ischial tuberosity and paralabral cysts.
So we should think about paralabral cyst of acetabulam as one of the non discogenic cause of Sciatica, if common causes of sciatica have been ruled out.

CONCLUSION:
Post operatively, our patient noted relief of pain. Started weight bearing at 3 weeks. At 2 year follow up the patient was comfortable without complaints. To our knowledge, only three cases of such cysts causing sciatica have been reported in literature, hence this case needs to be reported.

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