

LESSON OF THE MONTH

An unusual cause of pain in both hips

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CASE HISTORY

In August 2001, a 55 year old renal physician presented with a three week history of a painful right hip. There was no obvious precipitating factor. The pain was situated over the outer aspect of the right hip as well as the groin, with intermittent radiation down to the right knee. At times, he needed to place a pillow between his knees to feel comfortable when lying down. Despite these symptoms, he was able to walk freely around Vienna on holiday.

On examination, there was pain on external rotation of the right hip as well as discomfort at the extremes of abduction and adduction. There was no tenderness over the greater trochanter.

An x ray examination of the right hip was normal. Magnetic resonance imaging (MRI) disclosed a bilobed 2 cm “collar-stud” cystic lesion, with one lobe intracapsular and the other extracapsular, just inferior to the lateral edge of the right acetabulum (fig 1). An acetabular ganglion cyst was diagnosed as the cause of his symptoms. The pain resolved with a two week course of diclofenac 50 mg twice daily.

The patient’s medical history consisted only of mild hypertension and hyperlipidaemia. Coincidentally, he had complained of an acute pain in his contralateral hip in 1995. MRI at that time showed a similar juxta-acetabular cyst of the left hip joint. That pain had also resolved completely with diclofenac 50 mg twice daily.

DISCUSSION

Ganglion or synovial cysts of the hip joint are rarely thought of as a cause of hip discomfort. Although meniscal cysts in the knee and labral cysts in the shoulder are well recognised as a cause of pain, there are relatively few published reports about

acetabular cysts.^{1–3} Part of the reason for this may be the poor sensitivity of plain radiology for detection of these structures. In addition, radioisotope scanning does not provide any specific abnormalities. The advent of MRI allows for much improved discrimination of soft tissue structures.

Two reports have described MRI findings of ganglia of the hip joint and their relationship with acetabular bone and labrum.^{1,3} A total of 14 patients (seven male, seven female) were discussed, with ages ranging from 29 to 82. Almost all patients presented with non-specific hip pain, which tended to be intermittent, and either localised or radiating. In six cases, there was a history of remote trauma. Three patients had known development of hip dysplasia while one had acetabular deformation secondary to underlying Paget’s disease. In some patients there were typical features of osteoarthritis.

The cysts depicted by MRI exhibited intermediate to low signal intensity on T₁ weighted images and high signal on T₂ weighted images. Cysts of the seven patients described by Schnarkowski *et al*¹ were located posterosuperiorly in five patients and anteriorly in two patients. Significantly, these seven cysts were located adjacent to a torn, deformed, or absent labrum.

An association of these cysts with dysplastic hips has been previously noted.^{2,4} A higher incidence of degenerative labral tears is reported in patients with acetabular dysplasia. One theory proposed to explain the pathogenesis of acetabular cysts involves tearing of the labrum by shear stress. The acetabular labrum overlies the femoral head tightly to increase hip stability. When a labral tear occurs, the loss of congruency between the acetabulum and the femoral head may lead to raised intra-articular pressure and a joint effusion. Synovial fluid may be forced into the acetabulum through the tear to form a bone cyst which is visible on plain radiography. Alternatively, the cyst may form in a juxta-acetabular position, in which case plain x ray findings are usually normal and MRI is needed for visualisation. Occasionally, nitrogen gas may accumulate within the cyst leading to radiolucency.³

In our case, there was no labral tear visible on MRI. It has been previously reported that arthroscopy is more sensitive than arthrography in detecting such tears.³ As far as we know, this is the first case report of bilateral hip pain from acetabular ganglion/synovial cysts. The occurrence in both hips at various times suggests a dysplastic process, although this was not identified on radiology.

There are few published reports to guide treatment. Our case suggests that acetabular cysts may respond well to conservative treatment, although surgical excision may be necessary in resistant cases.

THE LESSONS

- Acetabular cysts are a cause of hip pain, which may mimic sciatica.
- Plain x ray findings may be normal, but MRI can visualise these cystic structures and any associated tears of the acetabular labrum.
- A trial of conservative treatment should be carried out.



Figure 1 MRI showing a bilobed 2 cm “collar-stud” cystic lesion.

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ECHO**Distress and low back pain are linked in schoolchildren**

Please visit the Annals of the Rheumatic Diseases website [www.annrheumdis.com] for link to this full article.

The largest population study to investigate low back pain (LBP) and mechanical and psychosocial factors together in schoolchildren has suggested that it may be a marker for distress.

A self completion survey and other measurements were completed for 1376 children aged 11–14 years. One month prevalence of LBP was significantly higher for girls than boys (28% v 19%) and for both with age (girls 18% v 34% at ages 11 and 14 respectively; boys 14% v 25%). Multivariate analysis showed that children with conduct or emotional problems had up to 2.4 times the odds of LBP and those with minor ailments like persistent headache and sore throat had 1.4–1.9 times the odds. Part time working also increased the odds but not apparently because of carrying or lifting heavy weights. Physical activity, body mass index (BMI), and weight of school bag were not important. In the whole group the prevalence of LBP increased stepwise with each significant risk factor—from 12% for children with none to 17% for those with all six.

The cross sectional study was based on schools in two areas of northwest England with a general population of mixed socioeconomic profile in rural and urban areas. Thirty nine schools contributed 1496 children, 1376 of whom completed questionnaires. BMI and bag weight were also recorded, and all data were collected during one school year.

LBP is a recognised problem in children, but evidence from separate studies has variously implicated physical load and adverse psychosocial factors.

▲ *Archives of Disease in Childhood* 2003;88:12–17.