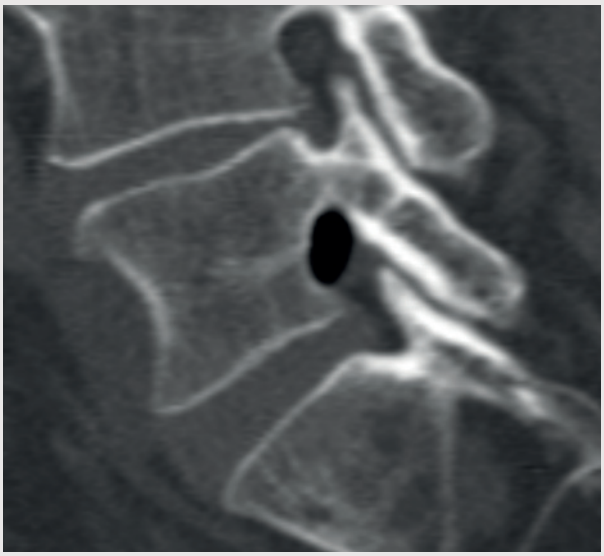
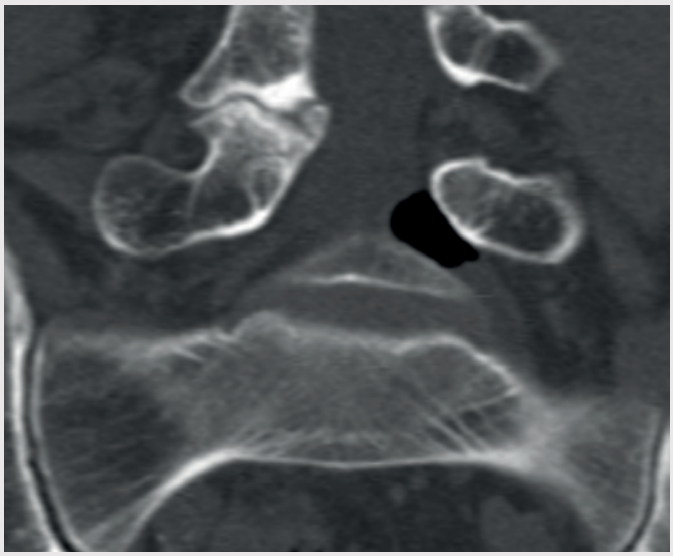
An unusual finding in a case of ischialgia





A man in his 60s was admitted to hospital with a two-day history of left-sided ischialgia and paresis development in L5 nerve innervated muscle. MRI showed a formation in the left lateral recess at L4/L5 level with dorsal dislocation of the left L5 nerve root. The formation had an unusually low MR signal giving rise to suspected calcification or the presence of air. A supplementary CT scan showed a well-defined collection of air in the same area (see images).

Clinical deterioration led to surgical exploration of the L5 root. Ventrally to the L5 root an amount of air was observable encapsulated in epidural soft tissue; an incision was made and the air released. Following this, the L5 root was softer to palpation and had free movement. The patient experienced considerable improvement postoperatively.

The presence of air in the intervertebral discs, known as the vacuum phenomenon, is a relatively common radiological finding in cases of degenerative changes in the lumbar spine. Cases are reported in the literature of gas in the spinal canal, in intervertebral foramina, in prolapsed tissue, epidurally and subarachnoidally, associated with the vacuum phenomenon (1). It may also occur secondary to degeneration in facet joints and ligaments.

In our patient, there was only low grade disc herniation without rupture in the anulus fibrosus and slight facet joint arthrosis at the levels concerned. The air may represent gas formation from a sequestrum from an earlier prolapse, alternatively a gas-containing pseudocyst associated with the vacuum phenomenon in adjacent intervertebral disc spaces. It is difficult on this basis to explain the acute onset case history, but incision and release of the air build-up in the patient was nevertheless therapeutic.

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The patient has consented to the publication of this article.

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