



## Case Report

# Postoperative intractable leg pain caused by dislocation of drainage tube

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## ABSTRACT

**Background:** A wide variety of conditions can cause recurrent postoperative lumbar radiculopathy.

**Case Description:** A 49-year-old female developed sudden recurrent postoperative right leg pain after a right-sided L5S1 microdiscectomy for a herniated disc. Emergent magnetic resonance and computed tomography studies demonstrated migration of the drainage tube into the right L5S1 lateral recess compromising the S1 nerve root. Following drain removal, the patient's right leg pain immediately resolved.

**Conclusion:** Migration of a lumbar wound drain into the operated lateral recess following a lumbar discectomy may result in acute, recurrent/intractable radicular pain that was readily resolved with drain removal.

**Keywords:** Drainage tube, Lumbar disc herniation, Radiculopathy, Spine surgery

## INTRODUCTION

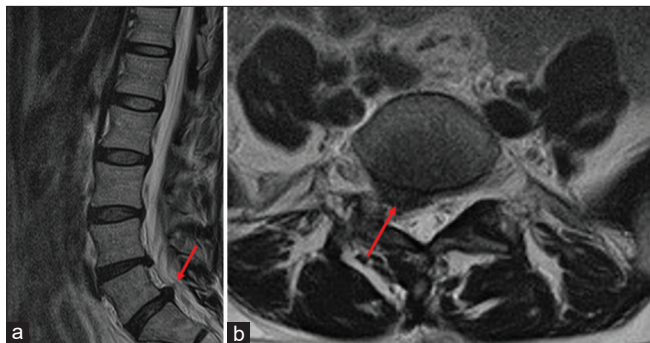
Placement of a drain in a lumbar wound following a lumbar discectomy is a common practice to prevent postoperative epidural hematomas (EDH).<sup>[3]</sup> However, these drains may rarely migrate of into the lateral recess causing severe postoperative recurrent radicular pain. Here, after a right L5S1 microdiscectomy, a 49-year-old female developed severe recurrent radicular pain. When the postoperative magnetic resonance (MR)/computed tomography (CT) confirmed drain migration into the right L5S1 lateral recess, surgical removal of the drain resolved the patient's root compression and complaints.

## CASE DESCRIPTION

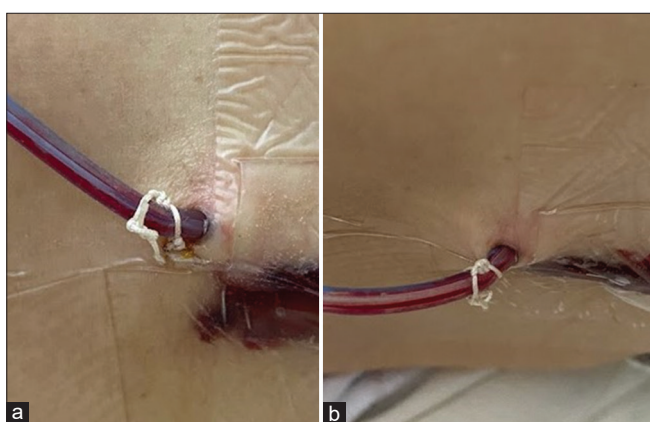
A 49-year-old female underwent a right L5S1 microdiscectomy for a lumbar disc herniation. At surgery, a wound drain was placed [Figures 1 and 2]. Immediately postoperatively, the patient's symptoms resolved, and the immediate post-operative plain X-ray showed that the drain was located dorsal to the S1 lamina [Figure 3a]. However, by the next morning, she developed severe recurrent right-sided S1 radiculopathy. Now, the X-rays, MR, and CT studies all confirmed that

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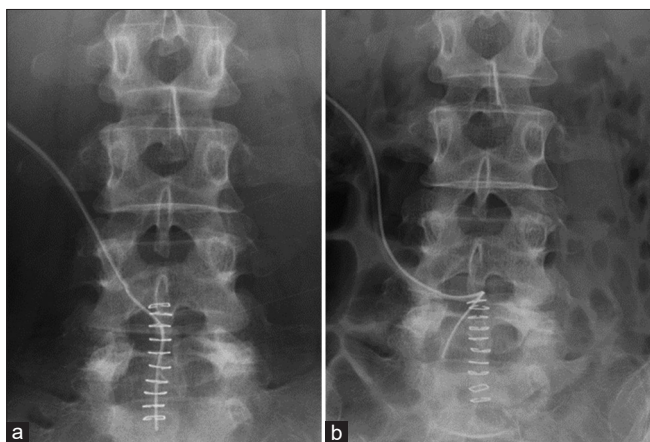
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**Figure 1:** (a and b) Preoperative magnetic resonance imaging. (a and b) T2-weighted image showed right S1 nerve root compression by lumbar disc herniation (red arrow).

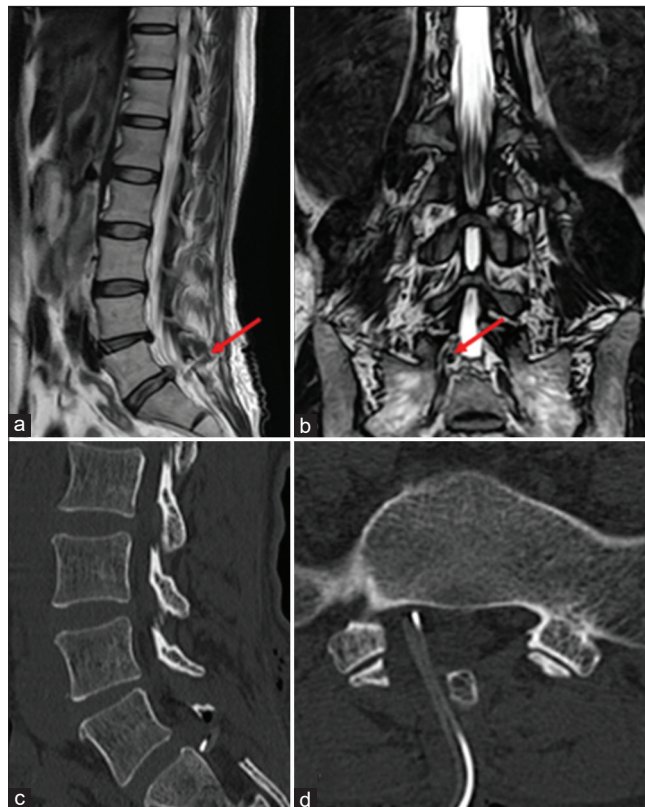


**Figure 2:** (a and b) Postoperative photos of fixed drain tube with non-absorbable suture at the time of pain recurrence.



**Figure 3:** (a and b) The comparative X-ray between postoperative day 0 and day 1. (a) Postoperative X-ray image at day 0. Drain was correctly placed dorsal to the S1 lamina. (b) Postoperative X-ray image at day 1. Drain was migrated into the right L5/S1 lateral recess.

the drain had migrated into the right L5/S1 lateral recess [Figures 3b and 4]. After drain removal, the right leg pain immediately resolved.



**Figure 4:** (a and b) Postoperative magnetic resonance imaging. (a and b) T2-weighted image in sagittal section and constructive interference in steady state in coronal section showed spinal nerve root compression with drainage tube (red arrow). (c and d) Postoperative computed tomography (CT). (c and d) Drainage tube was migrated into the right L5/S1 lateral recess on sagittal and axial CT images.

## DISCUSSION

Recurrence of radicular pain after a lumbar discectomy is most commonly attributed to: Postoperative EDH contributing to cauda equina syndromes, cerebrospinal fluid leaks/fistulas (i.e., including root extrusion through durotomy sites or loculated cerebrospinal fluid compressing the cauda equina), or recurrent disc herniations.<sup>[1,2,4,5]</sup> In this case, following a right-sided L5/S1 microdiscectomy, the X-rays, MR, and CT studies documented drain migration into the right L5/S1 lateral recess that caused the recurrent right-sided S1 radiculopathy. Note, this “migration” occurred despite the drain being “tightly” sutured in place (i.e., to the skin). Following drain removal, the patient’s complaints immediately resolved.

## CONCLUSION

Following lumbar discectomy, wound drains may rarely migrate into the operated lateral recesses causing symptomatic recurrent radiculopathy. In these instances, X-ray, MR, and CT confirmation of drain migration should prompt early drain removal to achieve rapid symptom resolution.

### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Nil.

### Conflicts of interest

There are no conflicts of interest.

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