

## A Case Report on Prolapsed Lumbar Intervertebral Disease (PLID) at Suo-Xi Acupuncture Hospital in Bangladesh

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### Abstract

**Background:** Low back pain and sciatica are two of the most common health disorders that people experience. Both the number of hours that employees put in and the amount of money that is lost by the nation as a whole see significant reductions as a result of these changes. Before beginning any kind of treatment with these individuals, it is very necessary to do a thorough physical assessment on them. It is possible for symptoms to worsen as a result of receiving insufficient medical or surgical treatment, which increases the likelihood of this happening. The purpose of this study is to evaluate the effectiveness of acupuncture in conjunction with PLID treatment. **Methods:** This inquiry took place at SUOXI Healthcare Limited in Shantinagar, Dhaka, Bangladesh. A 36-year-old male patient has been complaining of lower back discomfort, tingling and numbness of right leg for the last two years. The diagnosis was confirmed with a MRI of lumbar spine. **Results:** Follow-up research showed promising outcomes. He no longer felt discomfort in his lower back and tingling and numbness of right leg, which he had been experiencing for two years. PLID patients may benefit from acupuncture, according to the findings of this study.

**Keywords:** PLID, Acupuncture, Acupuncture, Physiotherapy, Mobilization, Manipulation, Stretching, Chinese Method, Low Back-pain, lumbar disc.

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### INTRODUCTION

A prolapsed lumbar intervertebral disc is a common source of back and leg discomfort (PLID). Prevalence estimates of PLID range from 1.9 to 7.6 percent in males and 2.2 to 5.0 percent in females [1]. Patients with PLID are at an increased risk for experiencing back pain, lower back pain (including sciatica), quadra equines syndromes, and radicular discomfort as a result of nerve root compression [2, 3]. Because of this, pain travels all the way down the leg. The lumbar discs include collagen, proteoglycan, and glycosaminoglycan. This reduces pressure on the spinal cord. The capacity of fibrochondrocytes to synthesis fatty acids declines with age, which is a hallmark of the degenerative disc process [4, 5]. As the disc dries up and eventually collapses, the annulus fibrosus is under increased stress. When a disc is too stressed, tears and fissures may form, increasing the likelihood that its

contents could herniate. When strong biomechanical loads cause the annular fibers to break catastrophically, a healthy disc may expel some of its contents. When the outer rings of an intervertebral disc break as a result of a medical condition called condiververtebral dissection, the result is a condition known as PLID, or a sliding disc. If you have a loss of bowel or bladder control, you should seek medical attention right once. A lumbar disc injury or herniation might be the root cause of your leg and back discomfort. Pain, numbness, and tingling in the legs might be caused by a herniated disc. All of these factors contribute to an even more unpleasant experience. When the matrix of the intervertebral disc dries up, it may cause prolapsed disc disease. In addition to degeneration of the lumbar disc, the umbrella term "lumbar disc disease" encompasses a number of other disorders that may cause discomfort in the lower back and down the sciatic nerve. This picture shows a herniated disc in the lower back, namely in the

lumbar spine. About a third of all cases of back pain are attributed to degeneration of the lumbar discs. This herniation may be painful if it pushes on the sensory nerves that supply the skin, which can lead to a loss of sensation and weakened muscles. Pain that travels down one leg, down the calf, and into the foot is a common symptom of nerve damage (sciatica). Any motorist, regardless of experience, is more likely to be involved in an accident while PLID is present on the road. It's no secret that the jobs of domestic servants, private sector service providers, and seamstresses are among the most dangerous for women. These women work alongside males in the same professional sectors. Employees with PLID have a higher rate of hospitalization, as shown by medical records.

## CASE REPORT

A 36-year-old man visited our clinic after two years of progressively worsening low back pain, as well as right leg tingling and numbness. The MRI of the Lumbar Spine was used as a measuring instrument in this controlled laboratory study. Broad-based posterior and posterolateral confined disc herniation, moderate posterior and posterolateral osteophytosis, and hypertrophied facet at the L4-5 level cause thecal sac depression and narrowing of both lateral recesses of bilateral neural foramina, as shown on magnetic resonance imaging. At the L3-4 level, the thecal sac is indented, and the bilateral neural foramina are narrowed, all because of the posterior and posterolateral osteophytosis, the abutting disc, and the hypertrophied facet. Bilateral neural foraminal constriction at the L2-3 level is being caused by posterior osteophytosis with an abutting disc. Having PLID is consistent with this result.



**Figure A: MRI of Lumbar Spine revealing PLID**

Initial treatments often include of mobilization, manipulation, and stretching of the lumbar spine, as well as acupuncture of the lower back and right leg. To assist the patient, feel more at ease in his surroundings, we use methods of lumbar mobility and manipulation. The follow-up study's results were

quite encouraging, and the overall conclusion was upbeat as well. After four sessions of acupuncture on his lower back and right leg, the patient reported feeling much better. The patient's long-term lower back pain and right leg tingling/numbness improved unexpectedly, to his great surprise.



**Figure B: Giving Acupuncture at the Lumbar Region**

## DISCUSSION

Prolapsed intervertebral discs are the most prevalent cause of back pain, making this the most common orthopedic ailment overall (lower back pain). One typical surgical technique for lumbar intervertebral disc prolapse [6] is fenestration of the vertebral lamina. Clinical investigations have shown that this medicine's anti-inflammatory, detumescent, blood-flow-enhancing, and collateral-dredging actions are well tolerated [7]. Acupuncturists and moxibustion practitioners need a firm grasp of the concepts of channels and collaterals. In the next sections, we will go further into these ideas. Recent studies have shown that the nervous system and the muscles cooperate to create pathways and connections that are used by other bodily systems for their own communication and function [8]. A 36-year-old man presented to our clinic complaining of low back discomfort and right leg tingling/numbness for almost two years. It was terrible to have to become accustomed to such pain. There were many experiments that we conducted on our own time and with our own means. Broad-based posterior and posterolateral confined disc herniation at the L4-5 level, together with moderate posterior and posterolateral osteophytosis and hypertrophied facet, are seen on MRI as indentation of the thecal sac and constriction of both lateral recesses of bilateral neural foramina. At the L3-4 level, the thecal sac is indented, and the bilateral neural foramina are narrowed, all because of the posterior and posterolateral osteophytosis, the abutting disc, and the hypertrophied facet. Bilateral neural foraminal constriction at the L2-3 level is being caused by posterior osteophytosis with an abutting disc. The person involved here is denoted by the sign PLID. The patient's illness was treated using a combination of acupuncture and physical therapy. Once

everything was accounted for, it was found to be ideal. After four acupuncture treatments, the patient's lower back pain and tingling/numbness in their right leg were significantly improved. Nonetheless, treatment proved successful in the long run.

## CONCLUSION

The follow-up study's findings took everyone by surprise. Pain in the patient's low back, along with tingling and numbness in the right leg, started to subside after four acupuncture sessions. The patient no longer has any lower back pain or tingling or numbness in his right leg. People with a condition called prolapsed lumbar intervertebral disc have benefited from acupuncture (PLID)

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