

Case Report

## A Case Report Acupuncture Treatment in PLID: A Case Report in a Specialized Acupuncture Health Care Hospital in Bangladesh

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Adults often complain of back and sciatic discomfort. People and the country suffer huge financial losses as a result of shorter working hours. Before treating these patients, a thorough examination is required. A lack of medical or surgical treatment may aggravate symptoms. The goal of this study is to determine if acupuncture has any impact on the symptoms of PLID. This inquiry took place at Suo-Xi Hospital, Shaan Tower, Chamelibagh, Santinagar, Dhaka, Bangladesh. A 43-year-old female patient has been experiencing low back discomfort that radiates down her left leg for the last four months. The diagnosis was confirmed with an MRI of the cervical spine. The follow-up research yielded good findings. After suffering from lower back discomfort for the previous five months, the patient felt much better on the second day of acupuncture and the reduced low back pain was no longer existent. Patients with PLID may benefit from acupuncture, according to this research.

**Keywords:** PLID, Acupuncture, Acupuncture, Chinese technique, Physiotherapy, Low Back-pain, lumbar disc, Lumbar Intervertebral Disc, Disc dehydration.

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### I. INTRODUCTION

A prolapsed lumbar intervertebral disc is a frequent cause of pain in the low back and/or legs (PLID). The male prevalence varies from 1.9 percent to 7.6 percent, while the female prevalence ranges from 2.2 percent to 5.0 percent [1]. Pseudo-lumbosacral degeneration (PLID) is one of the most frequent chronic illnesses of the lumbar spinal column in the elderly, and it is linked with radicular pain, sciatica, and the quadra equines syndrome, as well as neurological deficiency and back pain [2-5]. Lumbar intervertebral discs are composed of collagen, proteoglycan, and glycosaminoglycan. Stress on the spine is lessened as a result of their presence. As we become older, our disc fibro chondrocytes lose their ability to synthesize proteoglycans. Dehydration and ultimate disc collapse place additional strain on the disc's protective ring of fibers, known as the annulus fibrosus. Disc herniation is more likely to occur if the annulus (the outer layer of

the disc) is subjected to considerable pressure. In the event of a catastrophic collapse of annular fibers in a healthy, normal disc, large biomechanical forces may trigger the outflow of the disc material. An intervertebral disc may fall out of its damaged outer rings due to medial condilervertebral dissection, often known as PLID or a sliding disc. When a person loses control of their bladder or bowels, they should seek emergency medical attention [6-9]. A herniated or ruptured disc in the lumbar spine may cause lower back and leg pain. A herniated disc may cause muscle cramps, sciatica, and tingling or numbness in the legs, all of which can be distressing. Sneezing, coughing, and leaning forward are common causes of pain. When the intervertebral disc matrix dries out, it produces prolapsed disc disease in the spine. This term is used by many clinicians and patients to describe a variety of back and sciatica pain issues, including lumbar disc disease. A lumbar herniated disc is shown in this article.

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Disc degeneration in the lower back is thought to be responsible for one-third of all instances of low back pain. If the most proximal part of the nerve is compressed by this herniation, discomfort, muscle weakness, and a loss of touch feeling may be the outcome. There is damage to the nerve, and as a result, the pain travels down one leg, down the side of the calf, and into the foot (sciatica). Nerve root impingement is most common between lumbar vertebrae 4 and 5 or between lumbar vertebra 5 and the first sacral segment. For individuals who are displaying symptoms, MRI of the cervical spine and CINE MRI were used to confirm the diagnosis. Workers in the building and construction business, the iron or metal industry, the food, and nutrition industry, as well as occupational driving, were shown to be among the most at risk for developing PLID outperforming computed tomography (CT). When PLID is present, the chances of an accident are up for both professional and non-professional drivers. Sewing machine operators and domestic helpers are among the women who work in high-risk professions. These ladies are employed in the same fields as their

male co-workers. According to the medical case history, PLID is statistically significant and systematic in the likelihood of hospitalization among various occupational categories.

## II. CASE REPORT

A 43-year-old female patient came to our clinic complaining of low back soreness that had been creeping down her left leg for the previous two months and had become unbearable. Our study is carried out with the use of MRI of the cervical spine and CINE MRI. Thecal sac identification at L5-S1 level due to posterior disc bulge with annular tear was seen from the MRI. Also, Thecal sac identification at L4-L5 level due to posterior disc protrusion was seen from the MRI. Although the soft tissues of the paravertebral area are not very significant, they are there nevertheless. cervical spine screening detects early indicators of degenerative disc disease in the cervical spine and helps to prevent further deterioration. In this case, a prolapsed Lumbar Intervertebral Disc was discovered to be the source of the patient's symptoms.



**Figure A, B, C, D, E:** MRI of the cervical spine showing the Thecal sac identification at L5-S1 level due to posterior disc bulge with annular tear. And Thecal sac identification at L4-L5 level due to posterior disc protrusion



**Figure F: CINE MRI showing the disc dehydration at L5-S1 and L4-L5 levels**



**Picture 1,2,3,4,5,6: Giving Acupuncture at the Lumbar Region**

Acupuncture, the Chinese technique, and physical therapy are all used by practitioners to get patients started on their treatment. The use of acupuncture therapy for chronic pain is becoming more popular in the treatment of this disorder. A computer user may utilize Chinese input methods to type Chinese characters into a computer while using a Chinese keyboard. Both phonetic readings and root forms are the two most common techniques of inputting Chinese characters into a computer, and they are both effective. Root shape approaches, on the other hand, allow for incredibly accurate and speedy input but entail a steep learning curve since they typically require an in-depth understanding of the stroke and component compositions of a character. When working with the

patient, we used isometrics, manipulation, and mobilization methods to help him move more freely. The results of the follow-up study were quite positive and encouraging. After the second day of acupuncture treatment there was a dramatic response seen in the lumbar area, there was a considerable improvement in the condition of the patient. The patient's lower back pain had been bothering her for a long time, but it was abruptly gone.

### **III. DISCUSSION**

Lumbocrural ache is the most prevalent symptom of a prolapsed intervertebral disc in the lower back, the most common orthopedic disorder (lower back pain). Intervertebral disc prolapse in the lower

back sometimes necessitates a surgical procedure called vertebral lamina fenestration [6, 7, 10]. This chemical has anti-inflammatory, detumescent, blood circulation-promoting, and collateral-dredging qualities, and it comes with no adverse effects. First, one needs to comprehend the concepts of channels and collaterals, which are discussed in further detail below. It is now thought that the nervous, muscular, circulatory, and lymphatic systems all work together to produce channels and collaterals that are then utilized by other systems and organs. Being in so much pain was horrible. We conducted a huge number of our own experiments. There is disc dehydration at the L5-S1 and L4/L5 levels, which is related to a loss in disc height when utilizing MRI of the cervical spine and CINE MRI to assess the lumbar spine using the CINE scanner. Both the posterior central and left paracentral discs are swollen, and there is a depression in the thecal sac due to facet hypertrophy. The middle canal is narrowed and depression is seen in the left facement. The individual in issue is PLID, as shown by the sign in question. Treatment for the patient's ailment included acupuncture, the Chinese technique, and physical therapy. In the end, everything worked out just great. The discomfort in my lower back has decreased significantly after the third acupuncture treatment. Fortunately, the treatment was successful.

## VI. CONCLUSION

The results of the follow-up investigation were spectacular. After the third day of acupuncture, the low back pain began to show recovery. Pain in the lower back of the patient had disappeared. Acupuncture has been shown to help patients with PLID regain their functioning abilities.

## REFERENCES

- Zhang, Y., Tang, S., Chen, G., & Liu, Y. (2015). Chinese massage combined with core stability exercises for nonspecific low back pain: a randomized controlled trial. *Complementary Therapies in Medicine*, 23(1), 1–6. <https://doi.org/10.1016/j.ctim.2014.12.005>
- Karamouzian, S., Ebrahimi-Nejad, A., Shahsavari, S., Keikhosravi, E., Shahba, M., & Ebrahimi, F. (2014). Comparison of two methods of epidural steroid injection in the treatment of recurrent lumbar disc herniation. *Asian Spine Journal*, 8(5), 646-652. <https://doi.org/10.4184/asj.2014.8.5.646>
- Tang, S., Qian, X., Zhang, Y., & Liu, Y. (2016). Treating low back pain resulting from lumbar degenerative instability using Chinese Tuina combined with core stability exercises: A randomized controlled trial. *Complementary Therapies in Medicine*, 25, 45-50. <https://doi.org/10.1016/j.ctim.2016.01.001>
- Wu, J. P., Qiu, F. Z., & Huang, J. S. (2000). *Surgery*. Beijing: Public health publishing house, 2216-2221.
- Shin, B. J. (2014). Risk factors for recurrent lumbar disc herniations. *Asian Spine Journal*, 8(2), 211–215. <https://doi.org/10.4184/asj.2014.8.2.211>
- Glazov, G., Yelland, M., & Emery, J. (2016). Low-level laser therapy for chronic non-specific low back pain: a meta-analysis of randomized controlled trials. *Acupuncture in Medicine: Journal of the British Medical Acupuncture Society*, 34(5), 328-341. <https://doi.org/10.1136/acupmed-2015-011036>
- Wang, Y., Yuan, H., Xu, D., & Wy, W. (2009). Balance acupuncture: An experimental study on the effectiveness of treating radicular pain in a lumbar disc herniation rat model. *Deutsche Zeitschrift Für Akupunktur*, 52(4), 24–32. <https://doi.org/10.1016/j.dza.2009.10.017>
- Kim, K. H., Kim, Y. R., Baik, S. K., Noh, S. H., Kim, D. H., Lee, S. W., & Yang, G. Y. (2016). Acupuncture for patients with lumbar spinal stenosis: a randomized pilot trial. *Acupuncture in Medicine: Journal of the British Medical Acupuncture Society*, 34(4), 267–274. <https://doi.org/10.1136/acupmed-2015-010962>
- Li, H., Shang, X. J., & Dong, Q. R. (2015). Effects of transcutaneous electrical nerve stimulation on rats with the third lumbar vertebrae transverse process syndrome. *Acupuncture in Medicine: Journal of the British Medical Acupuncture Society*, 33(5), 400–405. <https://doi.org/10.1136/acupmed-2014-010752>
- Du, Z., Shao, P., & He, Y. H. (2009). Clinical observation on 32 cases of lumbar intervertebral disc herniation treated by electroacupuncture on Huatuo Jiaji points. *Journal of Traditional Chinese Medicine*, 50(7), 617-619.
- Su, G., Zhou, Z., & Luo, J. (2011). The clinical observation of treating lumbar disc herniation resulted from stagnancy of both blood and qi using acupuncture. *CJTCM*, 23, 320-322.
- Qi, Z., & Xiao-Gang, Y. (2005). Clinical observations on the treatment of lumbar intervertebral disc protrusion by acupuncture and Tuina. *Journal of Acupuncture and Tuina Science*, 3(6), 39–41. <https://doi.org/10.1007/bf02851668>
- Zhang, C. (2003). Protrusion of lumbar intervertebral disc treated by ultra-short wave and the point injection in 40 cases. Chung iTsaChih Ying Wen Pan, *Journal of Traditional Chinese Medicine*, 23(1), 43–44. <https://pubmed.ncbi.nlm.nih.gov/12747198/>
- Chen, W., Yang, A. T., Dai, M. T., & Fu, Q. L. (2009). Observation on therapeutic effect of electroacupuncture under continuous traction for treatment of lumbar disc herniation. *Zhongguozhenjiu* [Chinese acupuncture & moxibustion], 29(12), 967–969. <https://europepmc.org/article/med/20088414>
- Shen, Y., Zhou, Q., Zhang, L., Gao, L., Zhang, D., Wang, X., Yu, Y., Zhang, Z., Liu, J., Liang, S., & Zhang, G. (2020). Electroacupuncture for lumbar disc herniation: A protocol for systematic review and meta-analysis: A protocol for systematic review and meta-analysis. *Medicine*, 99(17), e19867. <https://doi.org/10.1097/MD.00000000000019867>