Scholars Journal of Medical Case Reports

Abbreviated Key Title: Sch J Med Case Rep ISSN 2347-9507 (Print) | ISSN 2347-6559 (Online) Journal homepage: <u>https://saspublishers.com</u>

Orthopedics and Traumatology

A Case Report on Prolapse Lumbar Intervertebral Disease (PLID) Treatment through Acupuncture Procedure

Dr. S.M. Shahidul Islam^{1*}, Dr. Huihui Li², Dr. Md. Humayun Kabir³, Sabina Yasmin⁴

¹PhD fellow in Pain Management, Specially Trained in Acupuncture Suoxi Health Care Limited, Shaan Tower, Chamelibagh, Santinagar, Dhaka, Bangladesh

²Consultant, Department of Orthopedics and Traumatology, People's Hospital of Chinese Medicine, Ruian City, China ³Pain Specialist, Assistant Professor, Department of Anesthesiology, Rangamati Medical College, Rangamati, Bangladesh

⁴CEO, Suo Xi Hospital Limited, Shaan Tower, Chamelibagh, Santinagar, Dhaka, Bangladesh

DOI: <u>10.36347/sjmcr.2022.v10i03.017</u>

| **Received:** 13.01.2022 | **Accepted:** 16.02.2022 | **Published:** 20.03.2022

*Corresponding author: Dr. S.M. Shahidul Islam

PhD fellow in Pain Management, Specially Trained in Acupuncture Suoxi Health Care Limited, Shaan Tower, Chamelibagh, Santinagar, Dhaka, Bangladesh

Abstract

Case Report

Lumbar disc disease is drying out of the spongy interior matrix of an intervertebral disc in the spine. Lumbar disc disease to encompass several different causes of back pain or sciatica term use by many physicians and back pain researchers. It is thought that about one-third of all back pain lumbar disc disease causes. Pain, loss of muscle strength, and loss of touch sensation may occur if this herniation causes the compression of the most proximal part of the nerve closely neighboring the intervertebral disc material. Pain usually is in the distribution of the nerve compressed, down the back of the leg, side of the calf, and inside of the foot which call sciatica. Most commonly, the nerve root between the fourth and fifth lumbar vertebrae or between the fifth lumbar vertebra and first sacral segment have impinged. Adults frequently experience back discomfort and sciatica. These result in a significant reduction in working hours, as well as financial losses for both individuals and the country. To treat these patients, a thorough examination is required. Inadequate treatment, whether medical or surgical, can have serious consequences, make the suffering worse. This case study was initiated in Suo Xi Hospital Limited, Shantinagar, Dhaka. A 43 years old female patient was visited in the clinic complaining of low back discomfort that has been spreading down her left leg for the past two months. The diagnosis was confirmed by MR and CT scan. The results of the follow-up study were excellent. The left leg showed signs of healing after the third day of acupuncture. The patient's lower back pain, which had been spreading down his left leg, was no longer present. Acupuncture can confirmative promote functional recovery for patients with PLID.

Keywords: PLID, Acupuncture, Acupuncture, Chinese technique, Physiotherapy, Low Back-pain, lumbardisc, Lumbar Inter Vertebral Disc, Disc dehydration.

Copyright © 2022 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

I. INTRODUCTION

Prolapse of the lumbar intervertebral disc (PLID) which is frequently encountered in clinic, may often induce low back and/or leg pain. The incidence is 1.9%-7.6% in men, and 2.2%5.0% in women [1]. The prolapsed lumbar intervertebral disc (PLID) is one of the most common, chronic lumbar vertebral column diseases of elderly people leading to back pain, low back pain, sciatica, quadra equines syndromes, radicular pain, and subsequently neurological deficit due to nerve root compression that leads to radiating pain up to whole lower limb [2-5]. The lumbar intervertebral disc complex structure which is а composed

glycosaminoglycan, collagen, proteoglycans, sparse fibrochondrocytic cells that serve to dissipate forces exerted on the spine. As part of the normal aging process, The disc fibro chondrocytes can undergo senescence which proteoglycan production diminishes. This leads to a loss of hydration and disc collapse, which increases strain on the fibers of the annulus fibrous surrounding the disc., Facilitating a herniation of disc material, should sufficient forces be placed on the disc, tears and fissures in the annulus can result. Instead, a large biomechanical force placed on a healthy, normal disc may lead to extrusion of disc material in the setting of the catastrophic failure of the

Citation: Dr. S.M. Shahidul Islam, Dr. Huihui Li, Dr. Md. Humayun Kabir, Sabina Yasmin. A Case Report on Prolapse Lumbar Intervertebral Disease (PLID) Treatment through Acupuncture Procedure. Sch J Med Case Rep, 2022 Mar 10(3): 237-240. annular fibers. PLID also known as a slipped disc is the soft, central portion to bulges out beyond the damaged outer rings a medical condiververtibral dissection affecting the spine. Rarely bowel or bladder control is lost, and if this occurs, seek medical attention at once [6-9]. Symptoms of a herniated disc may include spasm or cramping, dull or sharp pain, muscle, sciatica, and leg weakness or loss of leg function. Sneezing, coughing, or bending usually intensify the pain. Prolapsed lumbar disc disease is the drying out of the spongy interior matrix of an intervertebral disc in the spine. Pain loss of muscle strength and loss of touch sensation may occur if this herniation causes the compression of the most proximal part of the nerve closely neighboring the intervertebral disc material. Pain which is the distribution of the nerve compressed, usually down the back of the leg, side of the calf, and inside of the foot call sciatica. Most commonly, the nerve root between the fourth and fifth lumbar vertebrae or between the fifth lumbar vertebra and first sacral segment have impinged., The diagnosis should be confirmed by an MRI scan in symptomatic cases. However, in cases with slight symptoms, a faster and cheaper CT scan (although it is inferior to an MRI scan) may be recommended. While an MRI scan can better portray soft tissue a CT scan can show the bony structures in more detail. It is identified that high-risk working people who are in occupations in the construction and building business, the iron or metal industry, the food and nutrition sector, and occupational

driving were among the most prevalent of suffering PLID. Drivers from all sorts of professional backgrounds are also at an increased risk of collision, to a greater or lesser level of PLID. Domestic assistants, private-sector service workers, and sewing machine operators are examples of women who work in highrisk employment, the majority of whom are employed in the same industries as males. According to the medical case history, PLID is statistically significant and systematic disparities in the likelihood of hospitalization across many occupational categories.

II. CASE REPORT

A 43-year-old female patient visited our clinic complaining of low back discomfort that has been spreading down her left leg for the past two months. We use MRI lumbo-sacral spine screening for WS to conduct our research. MRI showed reduced disc height at the L4/L5 level due to disc dehydration. Facetal hypertrophy causes thecal sac depression, miuld canal stenosis, and the left lateral recess of the facement in the posterior central and left paracentral disc bulges. The cauda was from an equine, and the spinal cord is clearly visible. The soft tissues of the paravertebral region are not particularly noteworthy. Cervical spine screening identifies early signs of degenerative disc degeneration in the cervical spine. A Prolapsed Lumber Inter Vertebral Disc was identified as the cause of the patient's condition.



Fig-A: MRI of Lumbo Sacral Spine with screening of WS reveling Disc dehydration at L4/L5 level with reduced disc height. Posterior central and left paracentral disc bulge, facetal hypertrophy causing thecal sac in indentation, miuld canal stenosis & left lateral recess of facement.

© 2022 Scholars Journal of Medical Case Reports | Published by SAS Publishers, India



Fig-B: Giving Acupuncture at the level of L4/L5 (spine)

III. DISCUSSION

An intervertebral disc prolapse in the lower back is the most frequent orthopedic sickness, and the most typical manifestation of this condition is lumbocrural discomfort. Fenestration of the vertebral lamina is a frequent surgical operation used in the treatment of lumbar intervertebral disc prolapse [6, 7, 10]. Anti-inflammatory, detumescent, blood circulationpromoting and collateral-dredging qualities are all possessed by this compound, and it has no negative side effects. Acupuncture and moxibustion are founded on the concepts of channels and collaterals, which are discussed more below. According to current understanding, the nervous, muscular, circulatory, and lymphatic systems all work together to produce channels and collaterals that are then used by other systems [9 -16]. The patient, a young woman of 34 years old, appeared to our clinic with symptoms of low backache that had been persistent for two months and that had radiated to her left leg. It was horrible to be in such pain. A lot of tests were carried out by us. MRI of the lumbar spine at the L4/L5 level reveals disc dehydration at the L4/L5 level, which is accompanied by a decrease in disc height. There are bulges in the posterior central and left paracentral discs, facetal hypertrophy resulting in the cal sac depression, middle canal stenosis, and a recess in the facement on the left side. That individual is PLID, as shown by this symbol. In order to treat the patient's condition, we employed acupuncture, the Chinese technique, and physical therapy. In the end, everything worked out well. After the third session of acupuncture, the low back stiffness and radiating pain to the left leg started to lessen. The treatment was successful.

IV. CONCLUSION

In the follow-up research, the findings were fantastic. After the third day of acupuncture, the left leg began to show symptoms of recovery. Pain in the patient's lower back, which had previously traveled down his left leg, was no longer evident. Patients with PLID may benefit from acupuncture's proven ability to aid in their functional rehabilitation.

REFERENCES

- 1. Wu, J.P., Qiu, F.Z., Huang, J.S. (2000). Surgery. Beijing: Public health publishing house, 2216-2221.
- Tang, S., Qian, X., Zhang, Y., & Liu, Y. (2016). Treating low back pain resulted 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
- 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., Shahsavarani, 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		

- 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. 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 ZeitschriftFürAkupunktur*, 52(4), 24–32.
- Shin, B.-J. (2014). Risk factors for recurrent lumbar disc herniations. *Asian Spine Journal*, 8(2), 211–215.
- Glazov, G., Yelland, M., & Emery, J. (2016). Lowlevel laser therapy for chronic non-specific low back pain: a meta-analysis of randomised controlled trials. Acupuncture in Medicine: *Journal* of the British Medical Acupuncture Society, 34(5), 328–341.
- 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.
- 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 randomised pilot trial. Acupuncture in Medicine: *Journal of the British Medical Acupuncture Society*, *34*(4), 267–274.

- 10. 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. acupuncture [Chinese Zhongguozhenjiu &moxibustion], 29(12), 967–969. 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
- 11. Du, Z., Shao, P., & He, Y. H. (2009). Clinical observation on 32 cases of lumber intervertebral disc herniation treated by electroacupuncture on Huatuo Jiaji points. *Journal of Traditional Chinese Medicine*, *50*(7), 617-619.
- 12. 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; 320-2.
- 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.