

Prolapsed Lumbar Intervertebral Disease (PLID) Treatment Through Acupuncture at SuoXi Hospital in Bangladesh: A Case Study

Dr. S.M. Shahidul Islam¹, Dr. Huihui Li²

¹PhD fellow in pain management, specially trained in Acupuncture

SuoXi Hospital, Shaan Tower, Chamelibagh, Santinagar, Dhaka, Bangladesh/CEO, SuoXi Hospital, Shaan Tower, Chamelibagh, Santinagar, Dhaka, Bangladesh.

²Consultant, Department of Orthopedics and Traumatology, People's Hospital of Chinese Medicine, Ruian City, China

CASE REPORT

Received: 11-06-2022

Accepted: 25-06-2022

Published: 30-06-2022

DOI:

10.36099/mamr.260122



Abstract: Low back pain and sciatica are two of the most prevalent ailments experienced by people. Working hours are greatly decreased, as are financial losses for both individuals and the country as a whole. Before treating these individuals, it is necessary to do a thorough examination. It is conceivable that inadequate medical or surgical treatment may cause symptoms to deteriorate. The aim of the case study was to see the effects of acupuncture in the treatment of PLID. The patient's diagnosis & treatment was given at SuoXi hospital in Shantinagar, Dhaka, Bangladesh, which was the site of this investigation. For the last one and a half years, a 21-year-old male student has been complaining of low back pain. MRI of the lumbar spine was used to confirm the diagnosis. The results of the follow-up study were excellent. The patient's lower back pain, which he had been suffering for the last one and a half years, was no longer present. Patients with PLID may benefit from acupuncture, according to this research.

Keywords: PLID, Acupuncture, Acupuncture, Physiotherapy, Mobilization, Manipulation, Active-Passive Movement, Low Back-pain, lumbar disc, Lumbar Intervertebral Disc, Disc dehydration.

1. INTRODUCTION

One of the most prevalent causes of low back and/or leg pain is the prolapsed lumbar intervertebral disc (PLID). The percentage of PLID worldwide comes in males, the prevalence spans from 1.9 percent to 7.6 percent, and in women from 2.2 percent to 5.0 percent.^[1] One of the most common, chronic lumbar vertebral column diseases in elderly people, PLID is associated with back pain, low back pain, sciatica and quadra equines syndromes as well as radicular pain and neurological deficit due to nerve root compression, which results in radiating pain up to the entire lower limb.^[2-5] Collagen, proteoglycan, and glycosaminoglycan are the building components of the lumbar intervertebral disc. They serve to disperse the pressures exerted on the spine. Proteoglycan production reduces when fibro chondrocytes senesce as part of the normal aging process disc. As a consequence of the disc's dryness and ultimate collapse, the annulus fibrosus fibers that surround it are placed under increased stress. If the disc is exposed to significant pressure, rips and fissures in the annulus may occur, making it simpler for disc material to herniate. Large biomechanical stresses may induce the outflow of disc material in the setting of a catastrophic collapse of annular fibers in a healthy, normal disc. It is a medical condovertebral dissection that affects the spine and causes

the soft, core component of an intervertebral disc to slide out beyond its damaged outer rings, known as PLID or a slipped disc. The loss of control over one's bowels or bladder is unusual; hence it is crucial to seek quick medical care if it occurs.^[6-9] Lower back and leg pain may be caused by a ruptured or herniated disc in the lumbar spine. Muscle cramps, sciatica, and numbness or tingling in the legs are all indicators of a herniated disc, which may be uncomfortable or even debilitating. The soreness is usually made worse by coughing, sneezing, or bending over. Prolapsed disc disease is caused by the drying of the intervertebral disc matrix. This term is used by many clinicians and patients to describe a variety of back and sciatica pain issues, including lumbar disc disease.

This article provides an illustration of a lumbar herniated disc. Lumbar disc degeneration is thought to be the cause of one-third of all occurrences of back pain. If the most proximal part of the nerve is compressed by this herniation, discomfort, muscle weakness, and 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 the fourth and fifth lumbar vertebrae or between the fifth lumbar vertebra and the first sacral segment. There was a correlation between PLID risk and occupations in the

construction or building business; iron or metal industry; food and nutrition; and occupational driving. In both professional and non-professional drivers, there is PLID, which raises the chance of an accident. Domestic helpers, private-sector service workers, and seamstresses 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 medical records, PLID has a statistically significant and systematic effect on the likelihood of hospitalization across a variety of occupational categories.

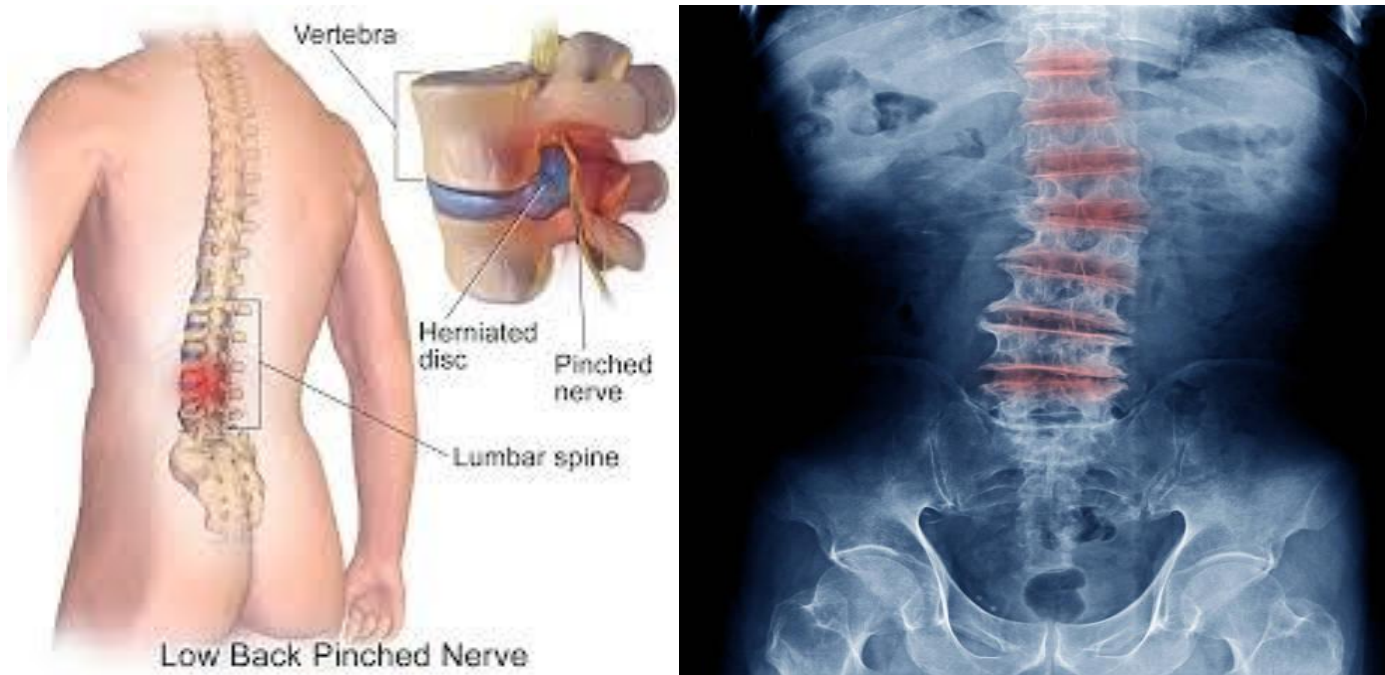


Figure 1: Low Back Pain at Limber Spine

II.CASE REPORT

A 21-year-old male student (patient) came to our clinic with complaints of low back pain that he had been experiencing for the preceding one and a half years and that had become intolerable for him. The MRI of the lumbar spine was used in this investigation, which was conducted in the laboratory. L4-L5 herniation with identification of thecal sac and compression of the left-sided trans versing L5 nerve root on MRI of the lumbar spine is shown by the left paracentral disc herniation at L4-L5. A disc bulge was seen at the L2-L3 level, resulting in the identification of thecal sac but not considerable neural compression. In addition, the lumbar spine was seen to be straightened. In this particular instance, it was revealed that the patient's symptoms were caused by a prolapsed lumbarintervertebral disc.

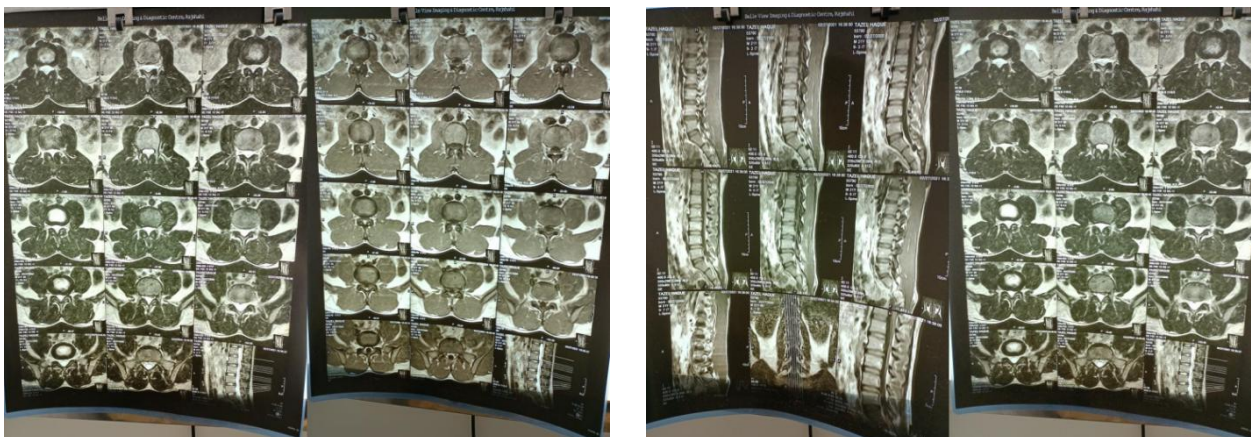


Figure A, B & C: MRI of Lumbar spine showing the prolapsed lumbarintervertebraldisc identification.

Physiotherapy (mobilization, manipulation, active and passive movement) and acupuncture in the lumbar area are all methods utilized by practitioners to get patients started on their treatment. However, root shape techniques, although providing very precise and rapid input, are associated with a steep learning curve due to the need of an in-depth grasp of the stroke and component composition components of a character, which is not always the case. Working with the patient, we use manipulation, mobilization, and active and passive movement approaches to assist him to move more freely and comfortably. The findings of the follow-up research were overwhelmingly good and promising, as was the overall conclusion. A significant improvement in the patient's condition was seen after his second acupuncture treatment in the lumbar region. After suffering from lower back discomfort for an extended period of time, the patient had an unexpected relief.



Pictures A & B: Acupuncture Treatment at Limber Region

III.DISCUSSION

As the most frequent kind of orthopedic sickness, lower back pain due to a prolapsed intervertebral disc is the most common symptom (lower back pain). In the treatment of lumbar intervertebral disc prolapse, the fenestration of the vertebral lamina is a popular surgical operation.^[6-8] No unfavorable side effects are connected with utilizing this medicine, which has anti-inflammatory, detumescent, blood circulation-enhancing as well as collateral-dredging qualities.^[9] In order to practice acupuncture and moxibustion, one must first understand the ideas of channels and collaterals, which are explored in further detail below.^[10,11] As currently understood, the neurological, muscular, circulatory, and lymphatic systems all collaborate to form channels and collaterals that are subsequently used by other systems and other organs.^[12-15] The patient, a 21-year-old young student, presented to our clinic with symptoms of low back pain that had been present for one and a half years at this point. It was excruciating to be in such discomfort. We carried out a large number of experiments on our own. When using an MRI of the lumbar spine to examine the lumbar spine at the L4-L5 and L2-L3 levels, it is discovered that there is disc dehydration at the L5 level, which is associated with a reduction in disc height. In addition, left para-central disc herniation at L4-L5 causes indentation of thecal sac and compression on the left-sided transversing L5 nerve root. Disc bulge was seen at L2-L3 causing thecal sac indentation not to produce significant neural compression. And the lumbar spine was seen straightened. As shown by this sign, the person in question is PLID. The patient's illness was treated using acupuncture and physiotherapy, all of which were complementary therapies. Overall, everything turned out fine in the long run. After the 2nd attempt at acupuncture, the pain of the patient's low back has lessened dramatically. Fortunately, the therapy was effective.

IV.CONCLUSION

The results of the follow-up investigation were spectacular. After the 2nd attempt 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.

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