

Title: Acupuncture as an Effective Treatment for Low Back Pain in Grade I Spondylolisthesis

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Intro: Spondylolisthesis, a condition in which a vertebrae in the spine slips forward, can be a significant cause of axial pain and radicular symptoms. Non-operative management is considered the first-line approach and includes NSAIDs, physical therapy, bracing, and activity modification. However, despite all these therapies available, not all patients respond and may need surgical intervention. Finding more non-surgical approaches to effectively treat the symptoms of spondylolisthesis is important to help patients who may refuse or have contraindications to surgical intervention. Here, we present a case in which acupuncture was used to effectively manage a patient's chronic lower back pain secondary to spondylolisthesis.

References

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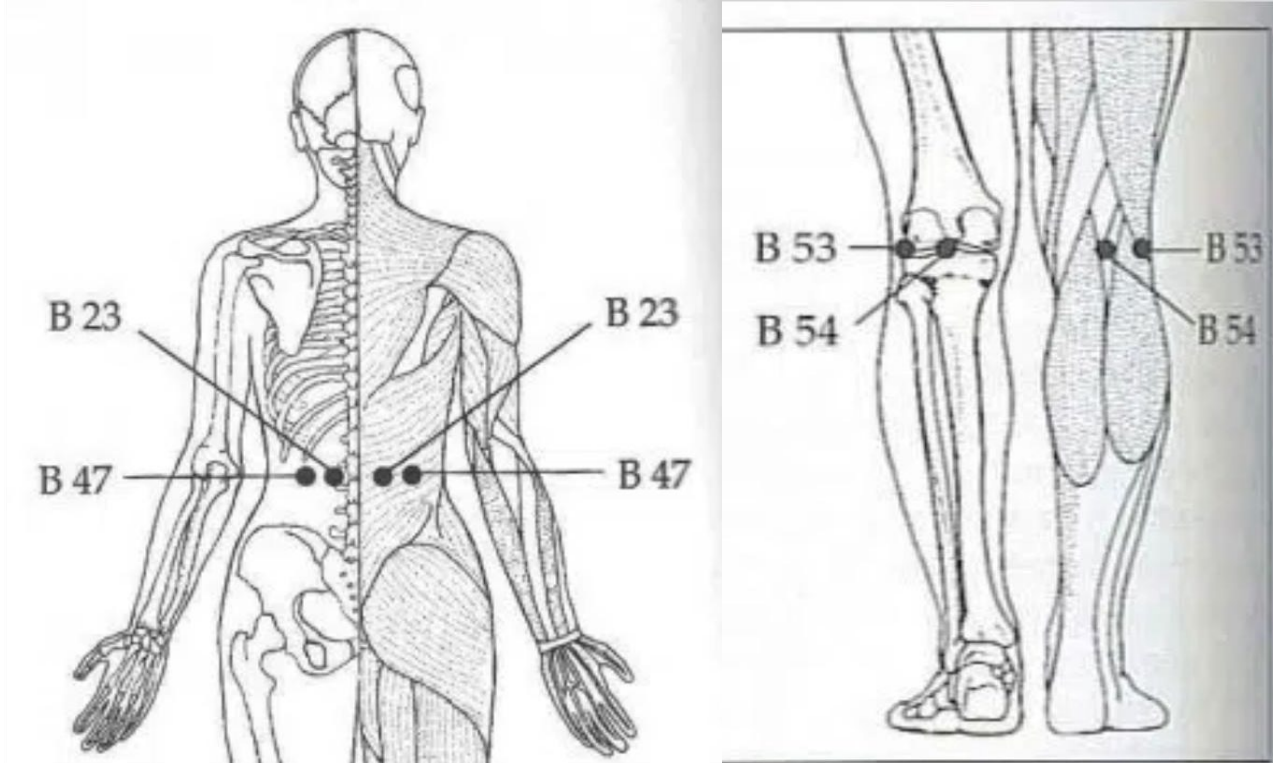


Figure 1: Acupuncture Points Utilized for Musculoskeletal Pain



Figure 2: (A) X-ray image of L5-S1 low-grade spondylolisthesis. (B) CT scan of L5-S1 pars interarticularis defect on sagittal view. (C) CT Scan of bilateral L5 pars interarticularis defect

Case: A 62-year-old male with a 20-year history of LBP and lumbar radiculopathy presented with worsening axial lumbosacral pain (4–10/10 on Visual analogue Scale (VAS), exacerbated by activity, lumbar extension, and twisting. Symptoms included bilateral hip/thigh radiation, lower extremity numbness, gait dysfunction (crouched posture), and sleep disruption. Prior therapies (chiropractic care, epidural injections, medications) provided minimal relief. Imaging confirmed Grade I L5/S1 anterolisthesis with bilateral pars defects, multilevel degenerative stenosis, and disc bulges.

Intervention: A 6-month multidisciplinary approach included Acupuncture, consisting of biweekly sessions that targeted UB-23, UB-40, UB-54, and Du-4. These acupuncture points (which are considered to be targets for lower back pain) were combined with electrostimulation for a duration of 15-30 minute sessions and TDP therapy to tonify Kidney Yang, dispel cold dampness, and improve Qi/blood flow. Additionally, physical therapy techniques, including core strengthening, hamstring stretching, and gait training were introduced into the patient's therapy regimen.

Outcomes: Patient's pain was reduced from 4-10/10 VAS to 2/10 VAS. The patient's gait mechanics, lumbar range of motion, and sleep quality also significantly improved after following this treatment. Additionally, the patient stated that he achieved an acceptable pain and resumed his daily activities with very minimal restrictions.

Conclusions: This case demonstrates that acupuncture has the potential to be a, safe, non-invasive adjunct method to help manage lower back pain secondary to spondylolisthesis. In our patient, conventional therapies had failed to relieve his pain. However, by integrating Chinese Medicine principles with PT, the patient found acceptable pain relief and functional gains. Further research is warranted to standardize potential adjacent medical protocols and to validate long-term efficacy.