COMMENTARY

Slump Test for a More Precise Diagnosis of Sciatica: A Single Centre Experience

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ABSTRACT

The accurate diagnosis of sciatica remains a challenge in clinical practice, often leading to delayed or inappropriate management. The slump test is a neurological physical examination used to find disc bulging, herniation at lumbar spine, or irritation of the spinal cord dura. It is a combination of other neuro-meningeal tests, namely, the seated straight leg raise, neck flexion, and lumbar slumping. It is a neurodynamic assessment that helps evaluate the sensitivity and integrity of the neural structures involved in the lower back and lower limb regions. This paper reported the use of slump test for a more precise diagnosis of sciatica using a single centre experience. From our experience, the slump test showed to be a valuable diagnostic tool for precise identification of sciatica in a single centre setting. Its high diagnostic accuracy, sensitivity, and specificity suggest that it can aid in early and accurate diagnosis, facilitating timely intervention and appropriate management of patients with sciatica. Incorporating the Slump Test into the diagnostic protocol for sciatica can enhance clinical decision-making and improve patient outcomes. Further prospective studies are warranted to validate these findings and assess the utility of the Slump Test in larger patient populations.

Keywords: Slump test, sciatica, low back pain

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INTRODUCTION

Sciatica is a common and often debilitating condition characterized by radiating pain, paraesthesia, and muscle weakness along the distribution of the sciatic nerve. It is most commonly caused by compression or irritation of the nerve roots in the lumbar spine, typically due to intervertebral disc herniation, spinal stenosis, or piriformis syndrome. Accurate diagnosis of the underlying pathology is crucial for effective treatment and management of sciatica.

While various diagnostic tools and imaging modalities exist, the clinical examination remains an integral component in the evaluation of sciatica. One such clinical test, the Slump test, has gained recognition as a valuable tool for diagnosing and understanding the mechanisms underlying sciatic nerve compression.

The Slump test is a neurodynamic examination that involves a series of passive movements and stretches aimed at stressing the sciatic nerve and its surrounding structures. By reproducing or provoking the patient's symptoms, particularly pain and paraesthesia, the test provides valuable insights into the underlying pathology and helps differentiate between various causes of sciatica. Via this slump test and analysis, we can correlate each component of slump test to particular problematic area, include muscles, joints, neural tension.

In this article, we present our single-centre experience with the Slump test as a diagnostic tool for sciatica. Our aim is to evaluate its effectiveness in achieving a more precise diagnosis, identifying the specific anatomical structures involved, and aiding in treatment planning.

DEFINITION AND EPIDEMIOLOGY OF SCIATICA

Sciatica, often known as low back pain (LBP) with sciatic radiation, is a disorder characterized by unilateral pain or paresthesia according to the distribution of the sciatic nerve or an accompanying lumbosacral nerve root (Aguilar-Shea et al. 2022). Large epidemiological studies have revealed that up to 37% of people with persistent back pain have a neuropathic pain component (Davis, Maini & Vasudevan 2023), which typically manifests as radicular leg pain (Konno et al. 2017). The term *'sciatica'* or *ischias* (Greek) was used by the ancient Greeks to indicate pain in the hip or thigh. Disc abnormalities were originally noticed in the nineteenth century, and in 1864 Lasègue published a test for sciatica pain that was eventually named after

him (Siddiq et al. 2020).

Sciatica is a painful disorder caused by sciatic nerve or sciatic nerve root pathology (Aguilar-Shea et al. 2022; Davis, Maini & Vasudevan 2023). The International Association for the Study of Pain defines neuropathic pain (NeP) as pain induced by a somatosensory system lesion or disease (Urban & MacNeil 2015). It is believed that 2% to 4% of the general population has NeP, with significantly greater prevalence in people with chronic low back pain (Urban & MacNeil 2015). Notably, the presence of NeP has been associated to poor recovery, as well as increased healthcare expenses and a lower quality of life (Urban & MacNeil 2015). It has been found that people with LBP that radiates to the leg(s) have clinically worse symptoms and a poorer recovery than those with LBP alone (Siddiq et al. 2020).

SIGN AND SYMPTOMS OF SCIATICA

The sciatic nerve sends direct motor signals to the hamstrings and lower extremity adductors, as well as indirect signals to the calf muscles, anterior lower leg muscles, and some intrinsic foot muscles. The sciatic nerve also gives sensation to the posterior and lateral lower leg, as well as the plantar portion of the foot, indirectly through its terminal branches. It is critical to understand that the majority of cases of sciatica are caused by an inflammatory condition that causes pressure of the sciatic nerve. Direct nerve compression, on the other hand, causes more severe motor dysfunction, which is typically not noticed and, if present, would necessitate a more thorough and expedited workup (Davis, Maini & Vasudevan 2023).

Sciatica might be characterised or related with sensations of burning, heaviness, or constriction. Patients with this condition feel pain and paresthesia in the sciatic nerve distribution or a lumbosacral nerve root (Davis, Maini & Vasudevan 2023). Sciatica is frequently worse by lumbar spine flexion, twisting, bending, or coughing (Aguilar-Shea et al. 2022; Davis, Maini & Vasudevan 2023). The degree of sciatic nerve irritation or damage develops from pain-paresthesia to motor deficit, indicating that nerve damage is increasing (Aguilar-Shea et al. 2022). This is frequently a chronic illness that is addressed with analgesics to control pain and NSAIDs to reduce inflammation (Davis, Maini & Vasudevan 2023).

Patients with sciatica typically suffer pain in the lumbar spine, and the discomfort is virtually always unilateral. Pain may be radicular to the ipsilateral afflicted extremity, which is a common feature. Patients usually express discomfort or a burning sensation deep in the buttocks, as well as paresthesia that goes along with the pain. In rare cases, there is concomitant ipsilateral leg weakness. The affected leg may be described as "feeling heavy" by these individuals. A straight-leg rise has varied sensitivity and specificity and may or may not be present depending on the underlying reason (Davis, Maini & Vasudevan 2023).

Not all sciatica-like symptoms are caused by the lumbar spine. Some of them are triggered at sites along the sciatic nerve's extraspinal journey, making diagnosis challenging for the treating physician and delaying appropriate treatment. Extra-spinal sciatica can be fatal in some situations, especially when the sciatic nerve is involved in cyclical sciatica or the piriformis muscle is involved in piriformis pyomyositis. In addition to cases of sciatica with a clear spinal or extra-spinal origin, some cases can be a combination of the two; the same might be said for pseudo-sciatica or sciatica mimics; we simply do not know how often extra-spinal sciatica is among total sciatica cases. Because treatment approaches for spinal, extra-spinal, and sciatica-mimics differ, a clear diagnosis will assist physicians in developing a tailored therapy plan (Siddiq et al. 2020).

CLINICAL REASONS FOR SCIATICA

Piriformis Syndrome

Piriformis syndrome is a disorder that need special attention because it is frequently misdiagnosed and ignored. The piriformis muscle connects the sacral spine to the upper femur and helps with hip extension and leg rotation (Larinov, Yotovski & Filgueira 2022). Because the piriformis muscle is so close to the sciatic nerve, any injury or irritation to it might trigger "sciatica symptoms." Overuse injuries, particularly in runners and other endurance sports, frequently induce piriformis muscle inflammation, with the resulting symptoms mimicking sciatica. As a result, these patients have increased pain when applying direct pressure to the piriformis muscle, increased pain when walking up inclines or stairs, and limited hip joint range of motion. Piriformis exercises, as well as hamstring stretches, can help relieve muscular tension and alleviate this painful disease. Some patients may benefit from lumbar and sacroiliac manipulation as well. Rest from the activity that is generating the pain is also beneficial (Davis, Maini & Vasudevan 2023).

Piriformis syndrome is categorised as either a primary (muscle and nerve anomalies, individual sciatic nerve path) or secondary (as a result of muscle and nerve damage), with or without nerve entrapment (entrapment neuropathy).

Superior Cluneal Nerve (SCN) in Slump

LBP is caused by entrapment of the superior cluneal nerve (SCN), according to various anatomical and clinical studies. The SCN is generated by the anastomosis of the T11-L4 spinal neurons' dorsal rami. The SCN is a cutaneous branch of the dorsal rami of the lumbar spine that penetrates the psoas major and paraspinal muscles. It runs through the thoracolumbar fascia's superficial layer before crossing the posterior iliac crest, or via the gluteal fascia after crossing the iliac crest, and provides the skin that covers the upper part of the gluteus muscles. When the medial SCN branch enters the gluteal fascia, the nerve may become

entrapped in the "osteo-fibrous tunnel," which is encircled by the iliac crest and the fascia linked to the iliac crest.

Although LBP is the most common presenting symptom, one-third of patients may describe leg discomfort that worsens with standing, walking, bending from the waist, twisting, climbing/descending stairs, or moving weight (s). Trescot further stated that SCN entrapment induced referred pain down the leg, potentially all the way to the foot, and that this pseudo-sciatica clinically mimicked radiculopathy caused by lumbar disc herniation or constriction of the lumbar spinal canal (Konno et al. 2017).

Quadratus lumborum and GME myofascial pain syndromes

The Quadratus lumborum (QL) muscle is a common cause of myogenic LBP (Siddiq et al. 2020). QL trigger points (TPs) cause discomfort to radiate to the SI joint, lower buttock, and lateral hip. Satellite TPs in the gluteal muscles, particularly the gluteus medius, may cause sciatica-like discomfort. Bilateral QL participation is also feasible. To undertake a thorough examination of the QL muscle, the patient should be positioned on his or her side, with enough space between the 12th rib and the iliac crest for palpation. Ipsilateral, atrophied paraspinal muscles, including the QL, are detected on the symptomatic side of patients with acute and chronic LBP using a 3-T MRI scanner (Siddiq et al. 2020).

TPs were considered active in a cross-sectional study of 42 individuals with nonspecific LBP if the respondent identified the local and referred pain. Active TPs in the QL, iliocostalis lumborum, and gluteus medius muscles were most common in patients with non-specific LBP who had elevated pain intensity and poor sleep quality. Furthermore, the cross-sectional area of the QL was observed to be lower in 36 housewives with chronic LBP compared to the control (P = 0.010), as demonstrated by CT scanning at the L4 spinal level (Siddiq et al. 2020). This is a debatable scenario. To rule out the clinical reasoning of "why the QL is atrophied at the ipsilateral LBP," the patient, in my opinion, the patient needs to go through a very complete assessment, including posture.

Sciatic Nerve Tumor

Sciatic Nerve tumor (benign and malignant invasion) and vascular malformations, extra-pelvic entrapment neuropathy, entrapment of the lateral cutaneous nerve of the thigh (LCNT), saphenous nerve, sural nerve, and common peroneal nerve could present with symptoms similar to lumbar sciatica (Siddiq et al. 2020). The causes of LBP with sciatic radiation are listed in Table 1.

New literature has mentioned that, herniated disc may not be the “cause or course” of patients’ back pain or sciatica. It could be due to stiffness or spasm of certain muscles, mechanically causing nerve root compression, which directly causes increased neural tension (Al-Sharaa 2021; Urban & MacNeil 2015)**.**

Table 1: Common causes for sciatica

No	Causes	References
1	Piriformis	(Davis, Maini, & Vasudevan 2023; Siddiq et al. 2020)
2	Entrapment of the superior cluneal nerve (SCN)	(Konno et al. 2017)
3	Quadratus lumborum myofascial pain syndromes	(Siddiq et al. 2020)
4	Sciatic Nerve tumor	(Siddiq et al. 2020)
5	Lumbar intervertebral disc hernia	(Aguilar-Shea et al. 2022; Davis, Maini & Vasudevan 2023; Siddiq et al. 2020)
6	Lumbar spinal stenosis, in the elderly population	(Aguilar-Shea et al. 2022; Davis, Maini & Vasudevan 2023; Siddiq et al. 2020)
7	Spondylolisthesis	(Aguilar-Shea et al. 2022)
8	Pelvic or lumbar muscular spasm and/or inflammation	(Davis, Maini, & Vasudevan 2023)
9	Spinal or paraspinal mass	(Aguilar-Shea et al. 2022; Davis, Maini & Vasudevan 2023; Siddiq et al. 2020)
10	Epidural abscess	(Davis, Maini, & Vasudevan 2023)
11	Epidural hematoma	(Davis, Maini, & Vasudevan 2023)
12	Trigger point TrP gluteal minimus	(Espinosa et al. 2021)
13	Entrapment of the superior cluneal nerve (SCN)	(Konno et al. 2017)
14	Quadratus lumborum myofascial pain syndromes	(Siddiq et al. 2020)
15	Potts Disease, also known as spinal tuberculosis	(Davis, Maini, & Vasudevan 2023)

VARIOUS PHYSICAL EXAMINATION/SPECIAL TEST FOR SCIATICA

The onus of diagnosing a prolapsed intervertebral disc has shifted to MRI. Many clinical tests are utilised to determine whether the pain is caused by pressure on the neural tissues or by anything else.

Neurodynamic tests are a sequence of multi joint limb and/or trunk movements that cause mechanical and physiological events in the neural system. A rise in tension in the nerve being examined is one of these mechanical occurrences. The term "neuro-dynamics" currently refers to the combined biomechanical, physiological, and morphological functions of the nervous system (Urban & MacNeil 2015).

The straight leg raise (SLR) and slump test are the foremost physical examination commonly used to assess lumbar disc herniation and sciatica pain.

Active Straight Leg Raise (SLR)

In supine laying, the SLR is widely used to diagnose low back sciatica pain. The patient raised his foot slowly away from the table with maintaining the knee in fully extended until 6-80 degrees, or until the sciatica pain is

provoked (Urban & MacNeil 2015). The angle between the lower limb and the bed is measured (Davis, Maini & Vasudevan 2023; Urban & MacNeil 2015). Normally up to 70 to 90 degrees of SLR can be reached without pain (Aguilar-Shea et al. 2022; Davis, Maini & Vasudevan 2023; Urban & MacNeil 2015).

Pain that occurs between 30 and 70 degrees of hip flexion and is felt mostly in the back is most likely caused by a lumbar disc herniation (Davis, Maini & Vasudevan 2023). In patients with sciatica, the angle will be decreased and the patient should feel running down, shooting pain towards the lower leg, resulted by increasing neural tension onto sciatic nerve. The L5 and S1 nerve roots were extended from 2 to 6mm by SLR, while the upper nerve roots (L2, L3, and L4) were barely strained (Urban & MacNeil 2015).

In this case, we believe it is preferable to perform the SLR passively rather than actively, because during active motion, the patient's opposite back stabiliser, frequently the contralateral multifidus, must contract against the active-lifting leg.

Active Slump Test

Another test is Slump test, which is distinct from SLR, it is done in seated position. The test is aimed to put sciatic nerve roots under aggravated tension (Al-Sharaa et al. 2021; Urban & MacNeil 2015).

The slump test is preferred over SLR for 2 reasons. First, slump test is more sensitive since it enhances the cephalad sliding of the spinal cord, as compared to caudal gliding in the SLR. Second, the slump includes neck flexion and extension which helps to differentiate motion limitations in neural tissue from other soft tissue inflexibility. Both tests produce pain due to herniated disc because of the traction on the nerve root, the SLR on L5S1, whilst Slump onto all the lumbar roots (Al-Sharaa et al. 2021; Urban & MacNeil 2015).

A slump test is carried out with the patient sat at the edge of the bed, with both hamstrings fully supported on the bed. At first, the patient will be taught to relax both arms behind the trunk. The trunk is therefore slouched, especially in the lumbar area. If there is no pain, continue to flex the neck until the chin meets the chest. The pain caused will be documented. Next, proceed with sciatica leg extension, until pain is provoked, this test is regarded as positive. The angle of knee extension will be noted down as an objective measurement before and after session.

COMMENTARY

In our experience, disregarding the herniated disc, each part or procedure of Slump test can be interpreted as different muscular involvement.

For slipped disc context that may lead to sciatica, in our opinion, there is another mechanism to explain this phenomenon. During the cough or sneeze, multifidus will contract as part of core stabilizer, and any contraction of these deep multifidus will increase the intradiscal pressure, which subsequently leads to irritation to the nerve root of sciatic nerve. According to our observation, almost 100% of patients with such conditions, will present with multifidus tightness mainly at Lumbar level L4/L5, L5/S1 region. This tightness is palpable via therapists' fingers, especially if patients are in prone lying with 1 pillow underneath the abdomen.

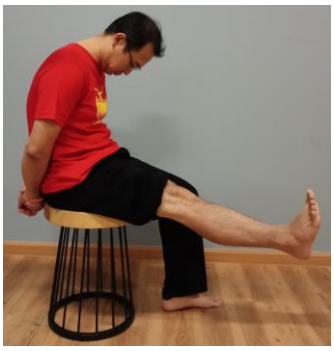
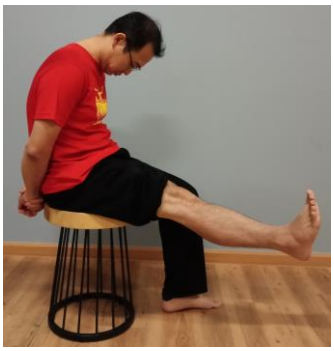
For piriformis context that may to lead to sciatica, in our understanding, we look into piriformis syndrome from biomechanical aspect, which excellently explaining all phenomenon. When pairing muscles of quadriceps and quadratus lumborum contracts together, ipsilateral pelvis will move into anterior pelvic tilt (APT). This move creates an increment of ipsilateral pelvic height (measurement from pelvic crest to ischial tuberosity). The distance between ischial tuberosity and greater trochanter will relatively increase, or we know it as "long-locked" or "stretched" or "passively elongated". Any muscles in the body with such "long locked" or "stretched" or "passively elongated" position will be resulted in weakness, scarring at tendon, tendinitis, as well as inflammation. We hypothesized that most provocative tests were caused by muscular tension, which caused high neural compression and stress on the nerve root and peripheral nerve. The neurodynamic test, as described in the literature, modulates the mechanical load on the nervous system, proving nerve tissue as the source of symptoms during the test [5], which means, every single step in Slump should also be interpreted as "what muscle that embed the nerve" can lead to mechanical strain onto the nerve. An accurate diagnosis is essential for directing patients to the most effective therapies. Because it combines spinal flexion and might thus potentially induce larger overall neural strain, the slump test was extremely sensitive in identifying NeP (Urban & MacNeil 2015).

In SLR test, lifting the sciatica leg also involves contralateral multifidus firing to stabilise the pelvic, vice versa. In acute sciatica with herniated disc, the patients are also appeared to have flat back, reduced lordosis, the reason being is to reduce the intradiscal pressure by creating excessive posterior pelvic tilt, which mechanically stretches the "multifidus" muscle. Vice versa, neurodynamic test, or Slump test still can provoke sciatica pain in non-diagnosed populations with less severe pain (Urban & MacNeil 2015).

In our humble practice, we managed to observe patterns of Slump test, each pattern does indicate part of the sciatic nerve being compromised. We use the sequence of slump test: slump - knee extension - ankle dorsiflexion - head flexion to ensure similar result. We do keep the head/neck flexion test at last, as we want to distinguish, if the compression is started from below Lumbar region (caudal glide), or above lumbar region (cephalic glide) (Baptista et al. 2022; Urban & MacNeil 2015).

In our experience, we also observed another pattern of Slump test. Previously, normally my practice is to start

Table 2: Slump Test

Steps	Figure	Description
1.		Slump the pelvis, this movement indicates multifidus stiffness or spasm if pain is provoked. This test cannot be performed in Acute low back pain due to spasm of muscles. Some chronic cases will experience stiffness over the lumbar region due to tightness in the multifidus. Although multifidus appears along the spine anatomically, they are most palpable at L3, L4, L5, S1 region, best in prone lying with pillow underneath the tummy to flex the spine.
2.		Extend the leg (starts with unaffected leg), this movement indicates ipsilateral QL stiffness or cramp if pain is provoked. Commonly patient may complain of stiff hamstring. It may not be due to stiff hamstring but is due to stiff QL muscle and leads to anterior pelvic tilt. Biomechanical changes of pelvic and ischial tuberosity is increasing the hamstring's muscle length subsequently.
3.		Dorsiflex the ankle, this movement indicates ipsilateral tibialis posterior muscle tightness or stiffness if pain is provoked. Sciatic nerve is embedded along the tibialis posterior muscle after the bifurcation at popliteus fossa? region.
4.		Lastly, flex the head, this movement indicates ipsilateral Erector spinae stiffness or cramp if pain is provoked. This is highly related to postural problems. In our practice, we look into splenius, semispinalis as well as erector spinae muscles. Treatment along the spine until thoracic region shows significant result.
5.		Our latest findings, if pain is provoked during the slump test onto the unaffected leg, that indicates gluteal minimus or gluteal medius tightness. We can address it as "contra-slump test".

the Slump test in contralateral leg / Good leg / non affected / non sciatica leg, followed by sciatica leg / affected leg. However, there are few scenarios that, contralateral leg Slump do provoke the pain at the sciatica leg. Upon detailed assessment, in conjunction with understanding of body mechanic, we diagnosed it as “contralateral gluteal medius and gluteal minimus tightness”.

Clinicians should not just rely on the angle of knee extension, provocative symptoms to diagnose a patient with sciatica. The clinicians should look into the quality of movement, the facial expression, the slowness into the movement (bradykinesia) and this can be added into the record of the slump test. Therefore, obtaining more precise diagnosis will require studies with camera setting in different view (facial expression, localised peripheral movement, slowness of the movement) (Urban & MacNeil 2015).

Some literature mentioned that the key to sciatica management is patient education (Urban & MacNeil 2015). We humbly disagree with this statement. The key is, find the root cause of the compression, before we educate the patients about sciatica. Same goes the management of referring patient for pain management (Coppieters et al. 2015). It is not because the patients cannot manage the pain, but the failure of the healthcare professional to find out the compression point(s), and the solution(s) to relieve the compression points.

PHYSIOTHERAPY MANAGEMENT OF SCIATICA

Physical therapists use a variety of therapies to treat low back pain; however, data for the effectiveness of these interventions is inadequate. Given the heterogeneity of LBP, it does not appear fair to expect that a single treatment approach will benefit all patients (Thiyagrajan 2017). As a result, we disagree with this statement. LBP is diverse, yet human anatomy and movements are similar and patterned by movement. As a result, treatment should focus on "why it happens, what is the mechanism" rather than "what is causing the LBP or slipped disc, which level, how damaged it is." As physiotherapists, we must investigate "movement" factors to explain all pain.

One of the therapeutic interventions used to treat musculoskeletal disorders is neural mobilisation (NM), which has been shown to reduce pain and improve functioning. NM is made up of a series of joint movements that encourage the gliding and tensioning of neural tissue, which can be done passively by therapists or actively by patients. It is hypothesised that NM can facilitate nerve gliding in respect to neighbouring tissues, improve neural vascularity, and improve axoplasmic flow, all of which result in improved neural function and, as a result, improved motor and sensory performance (Baptista et al. 2022).

Neurodynamic approaches are divided into two types: those that try to mobilise the structures that surround the nervous system and those that aim to mobilise the nervous system itself. Techniques that try to mobilise the structures that surround the nervous system include a cervical contralateral lateral glide technique and a lumbar contralateral lateral flexion technique. Tensioning and sliding procedures are methods of mobilising the nerve system. A tensioning technique achieves nerve mobilisation by manipulating one or more joints to stretch the nerve bed, causing the nervous system to move relative to its surrounding structures. Biomechanical studies have shown that elongating the nerve bed raises strain (the ratio of elongation to original length) in the nervous system, and that cumulative strain increases occur when numerous of these joint movements are coupled.

Alternatively, in a sliding technique, at least two joints are moved at the same time in such a way that the movement in one joint offset the increase in nerve strain generated by another movement. Such sliding procedures were devised and are used with the idea that they are associated with significantly larger nervous system excursions relative to surrounding structures, but without the potentially large increases in nerve strain. As a result, sliding and tensioning procedures may be recommended at various stages of a rehabilitation programme (Aguilar-Shea et al. 2022).

Visual Analogue Scale was used in NM test [9]. In our experience, VAS is a “subjectively objective” measurement. We preferred to observe for quality of movement, the numbers of compensation during the Slump test or NM.

Spinal stability and core muscle strength are critical. Daily isometric strengthening exercises will aid with spine stabilization (Aguilar-Shea et al. 2022). Pool exercise, followed by any machine-based exercise, is great for ultra-low-impact training. Exercises with a higher impact, such as jogging and standing weights, should be avoided. We need to have more critical thinking and ask, why do we need to exercise the stabiliser? It is “most likely” due to the weakness of core muscles? In our practice, the reason behind our decision over treatment plan is very clear. If multifidus is overacting, it will be resulting in spasm. Therefore, core activation in early stage is crucial to “swap” multifidus contraction by core. Deep tissue massage is not an adjuvant treatment. As a practitioner, we shall ask, why it works for sciatica? What is the explanation? What is the mechanism of the recovery after deep tissue massage? The answer is so simple, that, deep tissue massage manages to ease the spasm of the multifidus, that simple. Adjunctive treatments such as deep tissue release massage therapy and biofeedback may be beneficial.

There is little evidence to support the effectiveness of employing the slump test as a therapy technique (Ellis & Hing 2008). This is because Slump test is just stretching the neural tension and to desensitise the neural tension.

Treatment should be focused on where is the compression and how to reduce the tension by looking into the mechanism that compression is creating the neural tension, which is explained by our slump demo.

CONCLUSION

In conclusion, the Slump test has proven to be a valuable tool for achieving a more precise diagnosis of sciatica, as evidenced by our single-center experience. The valid physical special nerve test should be able to interpret where exactly the compression of the nerve is, instead of just indicating “positive” or “negative”. By carefully observing and evaluating the patient's response to the test, we were able to differentiate between various causes/site of sciatic nerve compression. While our conclusions are based on a single-center experience, further research and multi-center studies are warranted to validate the findings and establish the broader applicability of the Slump test in diagnosing sciatica.

Nevertheless, our results strongly support its inclusion in the diagnostic armamentarium for sciatica, aiding clinicians in providing targeted and effective management strategies for patients suffering from this debilitating condition.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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