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Journal of Stem Cell Research & Therapeutics

Case Report

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The SONG laser protocol and multilevel degenerative disk disease: a case report

Abstract

Background: Multilevel degenerative disk disease is a debilitating condition often requiring surgical intervention. This case report explores the efficacy of the SONG Laser Protocol in treating this condition using autologous human Very Small Embryonic Like (hVSEL) stem cells. **Case summary:** A 43-year-old male presented with severe lumbar pain and disability, necessitating a sabbatical from work. MRI findings revealed multilevel degenerative disk disease with significant herniation and desiccation at L3-L4 and L4-L5 levels. The patient underwent two rounds of SONG Laser Protocol treatment with localized intradiscal injections of hVSEL stem cells. Post-treatment results showed increased intervertebral disk height (20–25%), and improved MRI findings. **Conclusion:** This case demonstrates, for the first time, the potential benefits of the SONG Laser Protocol in regenerating intervertebral disk structures and alleviating symptoms in degenerative disk disease. Further clinical trials are warranted.

Keywords: SONG Laser Protocol, degenerative disk disease, hVSEL stem cells, case report

Volume 11 Issue 1 - 2026

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Received: October 28, 2025 | **Published:** January 12, 2026

Introduction

Multilevel degenerative disk disease involves progressive structural deterioration across multiple lumbar spine levels, often resulting in chronic pain and disability[1]. Conventional treatments include spinal fusion surgery to immobilize affected vertebrae.[1] The SONG Laser Protocol offers a novel approach by activating autologous human very small embryonic like(hVSEL) stem cells in Platelet Rich Plasma (PRP) using a modulated red laser.[2,3] This protocol has shown promise in various conditions such as anti-aging,[4] dementia,[5] radiculopathy[6] and Parkinson's disease[7] but remains under investigation for its mechanism of action.

The risk of the procedure is analogous to venipuncture and there have been no side effects recorded following the procedure.

Patient information

a) Age/Gender: Male, 43 years old at initial presentation

b) Chief complaint: Severe low back pain with significant functional impairment (bedridden 50–75% of the week)

c) Medical history: Adrenal fatigue symptoms, immune-compromised activity, disrupted sleep due to pain

d) Diagnosis: Multilevel degenerative disk disease with severe herniation at L3-L4 and L4-L5

e) The patient was referred to Xtend Optimal Health Center in May 2024 after declining a neurosurgical recommendation for full lumbar spine fusion.

Clinical findings

1) Pre-Treatment Oswestry Disability Index (ODI): 70%

2) MRI Findings (November 2023) (Figure 1):

i. Significant herniation at L3-L4 (8 mm AP) and L4-L5 (7.2 mm AP)

ii. Mild scoliosis and loss of normal lordosis

iii. Disk desiccation at L3-L4, L4-L5, and L5-S1

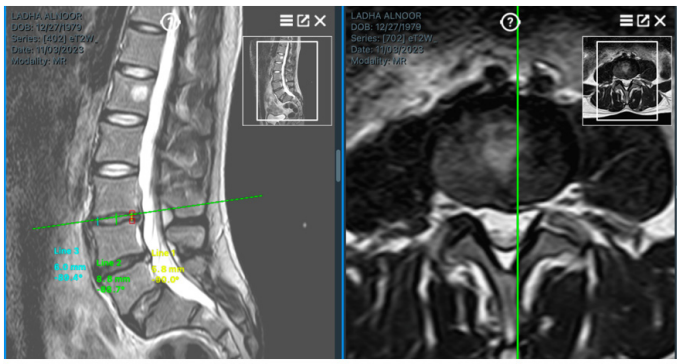

Figure 1 Pre treatment.

Therapeutic intervention

Pre-treatment phase (March–May 2024):

A three-month preparatory phase aimed to reduce inflammation and viral load using:

a) Ultraviolet Blood Irradiation (UVBI)

b) Hyperbaric Oxygen Therapy (HBOT)

c) Pulsed Electromagnetic Fields (PEMF)

d) Extra Corporeal Blood Ozonation Oxygenation (EBOO)

e) Peptide therapy and nutraceuticals

Treatment phase

Two rounds of localized intradiscal injections of SONG Laser activated hVSEL stem cells were administered in June and July 2024.

1. **Localized Intradiscal Injections:**

a) Injection sites: L3-L4 and L4-L5

b) Volume: 1.25 ml per disk space; additional injections into facet joints (1.5 ml per side)

2. **SONG laser application**

a) Calibration per protocol standards

b) Targeted laser exposure for disc spaces and lumbar regions

3. **Systemic Treatment:**

First round only: PRP infusion enhanced by SONG Laser activation

Outcome and follow-up

a) MRI Findings (January 2025) (Figure 2)

b) Post-Treatment Oswestry Disability Index (ODI) (Figure 3): Improved to 20%

i. Increased disk height at L3-L4 (+2 mm) and L4-L5 (+0.5–1 mm)

ii. Resolution of scoliosis; improved lordotic curve alignment

iii. Reduced herniation size at L3-L4 (7.2 mm x 7 mm)

The patient reported significant pain relief and resumed normal daily activities.

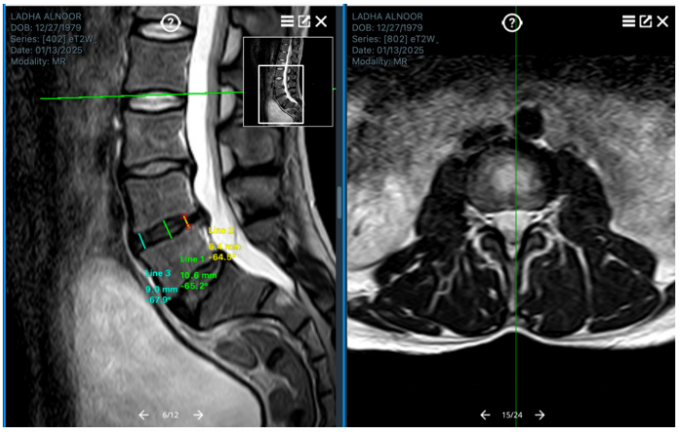

Figure 2 Post treatment.

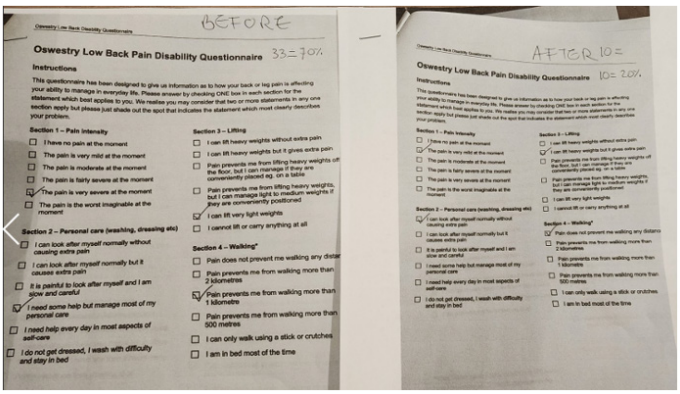

Figure 3 Oswestry pain score pre- and post-treatment.

Discussion

This case highlights the potential regenerative effects of the SONG Laser Protocol on intervertebral disks affected by degenerative changes:

a) Increased disk height suggests rehydration or tissue regeneration.

b) Improved ODI scores reflect substantial functional recovery.

c) MRI findings indicate reduced herniation severity at treated levels.

While promising, these results require validation through larger-scale studies to confirm efficacy across diverse patient populations.

Conclusion

The SONG Laser Protocol demonstrates potential as a minimally invasive alternative for managing multilevel degenerative disk disease. Its ability to regenerate intervertebral disks warrants further investigation through randomized controlled trials.

Acknowledgments

None.

Conflicts of interest

The authors declare that there are no conflicts of interest.

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