Beyond the Scalpel: Exploring Mindfulness Approaches and Narrative Inquiry for Failed Back Surgery Syndrome

Ritika Gupta
OMS-III, Arizona College of Osteopathic Medicine, Midwestern University
19555 N. 59th Ave., Glendale, AZ, 85308
ritika.gupta@midwestern.edu

Sam Safavi-Abbasi, M.D
Neurosurgeon, Yavapai Regional Medical Center
1003 Willow Creek Rd., Prescott, AZ, 86301
sam.safavi-abbasi@commonspirit.org

Charles Finch, D.O
Chair of Integrative Medicine, Arizona College of Osteopathic Medicine, Midwestern University
19555 N. 59th Ave., Glendale, AZ, 85308
cfinch@midwestern.edu

Abstract

Failed Back Surgery Syndrome (FBSS) is a condition that is characterized by persistent or recurrent low back pain after spine surgeries. It is a prevalent condition that affects a significant proportion of adults in their lifetime, ranging from 51% to 84%. The increasing rates of back interventions in the United States have contributed to a noticeable rise in Failed Back Surgery Syndrome prevalence. This condition is marked by its complexity and heterogeneity, which presents ongoing challenges for effective treatment strategies.

This case report provides details about a patient who has been experiencing chronic back pain for 15 years despite exhaustive adherence to guideline-based conservative and surgical interventions. In this case, we employed diverse screening questionnaires and a somatic-based approach to investigate an association between the patient's pain and adverse childhood experiences. This approach led us to hypothesize that psychosocial factors, such as adverse childhood experiences, may have played a significant role in the onset and persistence of the patient's Failed Back Surgery Syndrome.

This case underscores the critical importance of addressing psychosocial factors that may influence the onset and persistence of Failed Back Surgery Syndrome. It highlights the need to adopt a holistic approach in Failed Back Surgery Syndrome management, emphasizing the multifactorial nature inherent to this syndrome. By taking a more comprehensive view of the patient's condition, healthcare providers may be able to develop more effective treatment strategies that address the physical, psychological, and social aspects of Failed Back Surgery Syndrome.

Keywords: *Failed Back Surgery Syndrome, osteopathic approach, low back pain, adverse childhood experience, biopsychosocial*

Introduction

Failed Back Surgery Syndrome (FBSS) manifests as persistent or recurring low back pain, often accompanied by or without sciatica, following one or more spine surgeries. There are now over a million total spinal surgeries done yearly in the past decade, increasing the prevalence of FBSS in the United States.[1] FBSS is reported to affect up to 40% of patients following back surgery.[2] Diagnosing and treating FBSS can pose significant challenges, as its contributing factors fall into broad categories encompassing pre-surgery, during surgery, and post-surgery stages.[2,3] The focus of the case report shifts towards a patient who, despite undergoing spinal surgeries, continues to endure low back pain that adversely impacts their daily activities and quality of life. The report meticulously details the patient's medical history, incorporating any pre-existing conditions that might have played a role in the development of FBSS. Emphasizing the attempts made before the initial consultation with our clinic, the report elucidates various treatments and managements. Furthermore, it underscores the necessity of addressing psychosocial factors contributing to the onset and persistence of FBSS. Ultimately, the case report offers valuable insights into adopting a holistic approach when managing a patient with FBSS, shedding light on the multifactorial nature of this intricate syndrome.

Case Presentation

An 80-year-old Hispanic male with a medical history including atrial tachycardia, benign hypertensive heart disease without CHF, gout, greater trochanteric bursitis of the left hip, jackhammer esophagus, stroke, DVT, hypertension (HTN), and sleep apnea presented to our clinic in 2022 with a chief complaint of persistent back pain despite undergoing numerous back and pelvic surgeries.

The patient, a former firefighter, was referred to neurosurgery after multiple neck, shoulder, orthopedic, and other procedures aimed at alleviating pain. His extensive surgical history includes back disorder surgery, rotator cuff surgery (1998), total knee replacement surgery (2009), thumb surgery, L4-L5 transforaminal lumbar interbody fusion with spacer placement (2011), total hip arthroplasty s/p hip injection failure (2018), Nervo thoracic spinal cord stimulator s/p internal post-generator removal (2019), L5-S1 Anterior Lumbar Interbody Fusion (ALIF) (2022), L2-L4 Lateral Lumbar Interbody Fusion (LLIF) (2022), L3-S1 Minimally Invasive Screw (MIS) percutaneous screw placement (2022), and removal of L4-L5 hardware (2022).

During the initial visit with our neurosurgery clinic, the patient expressed frustration with conservative and medical management for his back and lumbar radicular pain. Despite various specialists and extensive imaging, an initial MRI revealed degenerative disc and joint disease with spinal canal and neural foraminal narrowing from L1-S1 (Figure 1). Contrary to expectations, pain persisted post-procedures (Figure 2). Subsequent to the 3rd and 4th back surgeries, CT and MRI results exhibited the successful alleviation of L1-S1 disc compression and neural foraminal stenosis (Figure 3).

Figure 1. Sagittal and Axial MRI of Spine Before Back Surgery in 2010. MRI shows degeneration of discs (red arrow) and stenosis of neural foraminal narrowing from L1-S1 (orange arrow).

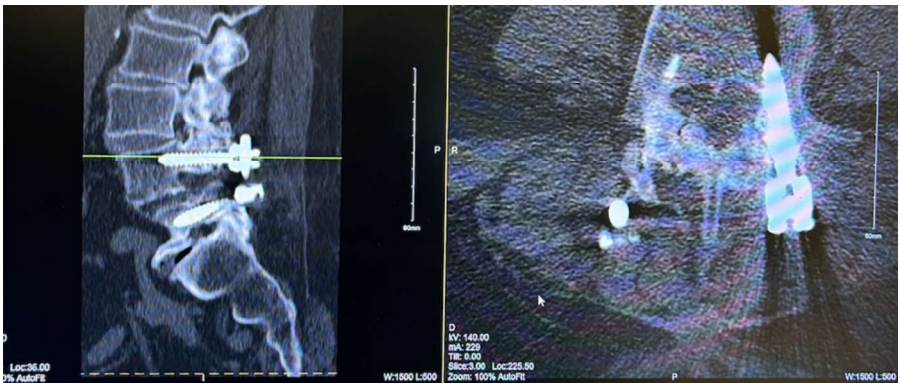

Figure 2. Sagittal and Axial CT Post-Surgical Intervention in 2010.

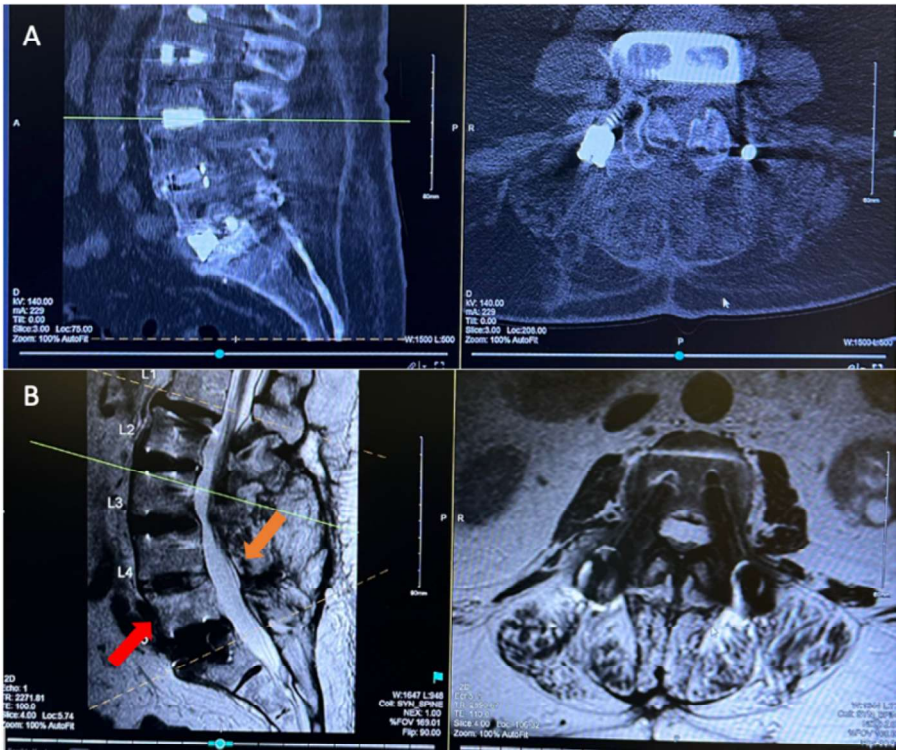

Figure 3. (A) Sagittal and Axial CT and (B) Sagittal and Axial MRI of L1-L5 with instrumentation present in all lumbar levels post 3rd and 4th back surgery.

Considering the heterogeneous nature of chronic pain, a somatic-based approach was adopted, delving into the patient's biopsychosocial background for a comprehensive understanding. We conducted a thorough assessment, including the Pain Catastrophizing Scale (PCS), Health Questionnaire (EQ-5D-5L), 12-question Short Form Health Survey (SF12), Adverse Childhood Experience (ACE) questionnaire, and Oswestry Low Back Pain Disability Questionnaire. These assessments revealed a multifaceted impact on the patient's physical and mental well-being.

To address his FBSS holistically, we proposed incorporating conversational therapy, a chronic pain program, mindfulness training, physical exercise, and self-acceptance of chronic pain. From October 2022 to August 2023, the patient received counseling during neurology clinic visits and continued physical therapy. Subjectively, the patient experienced some alleviation of his pain; however, he began to report a

shift of pain from his back to his hip by September 2023. Following unsuccessful interventions for right hip pain, including injections and SI joint fusion, the patient became discouraged.
After extensive discussions, the patient agreed to revisit our holistic treatment plan. Despite challenges with mindfulness practice adherence, the patient has become more open-minded, acknowledging the limitations of intensive medical interventions. Although progress has been gradual, our most recent visit in the current year revealed a reduction in pain and an improvement in the impact of his biopsychosocial factors on his chronic pain, as confirmed by the repeat of the screening questionnaires.

Discussion

The 80-year-old Hispanic male presented in this case has been grappling with persistent back pain despite undergoing an extensive history of medical interventions and surgeries. This discussion delves into the multifaceted aspects of the case, with a focus on various potential factors such as the impact of adverse childhood events (ACEs) on chronic pain, inadequacies of previous surgical interventions, and the prospects of adopting an osteopathic approach and holistic measures for enhanced pain management.

The patient disclosed a traumatic childhood marked by familial struggles with alcoholism and violence. Given the multi-casual nature of chronic complex pain, it is important to consider psychological factors such as ACEs. Research has shown that there is a potential connection between ACEs and an elevated risk of persistent pain in adulthood.[4] Therefore, it is crucial to understand the psychosocial dimensions of a patient's history as it may offer essential insights into the origin and perpetuation of his pain.

A biopsychosocial approach to chronic illness recognizes the interplay between biological, psychological, and social factors in shaping an individual's experience of pain.[5] In the context of our case, understanding the impact of adverse childhood events (ACEs) on the patient's chronic pain underscores the importance of psychological factors in contributing to and perpetuating pain.[4] This approach allows healthcare providers to tailor interventions that address the physical symptoms and the psychological and social dimensions of the patient's pain experience.

Despite an exhaustive array of surgical interventions, the patient's persistent pain points to the possibility of failed back surgery syndrome (FBSS). Therefore, it is essential to critically reflect on the patient's surgical history, raising questions about the decision-making process that led to multiple interventions. The surgeons' oversight in recognizing potential red flags, indicating the patient might not be an ideal candidate for surgery, highlights the importance of a comprehensive evaluation that extends beyond anatomical considerations.[1]

Taking a transdisciplinary approach to chronic pain further enhances the understanding and management of conditions like failed back surgery syndrome (FBSS). A transdisciplinary model integrates knowledge and expertise from various disciplines, fostering collaboration among healthcare professionals to develop a holistic, patient-centered care plan.[6] In the case of FBSS, combining insights from neurosurgery, osteopathy, psychology, and other relevant fields can lead to a more comprehensive understanding of the patient's condition, allowing for nuanced and effective interventions.

Reevaluating the case through an osteopathic lens becomes imperative, considering the patient's history of unsuccessful surgeries. The osteopathic approach emphasizes a holistic understanding of the body's interconnectedness and the importance of musculoskeletal balance. By addressing somatic dysfunctions and considering the whole patient, osteopathic interventions offer novel avenues for managing FBSS, focusing on restoring structural integrity and function. For patients like ours who have chronic back pain, we could implement osteopathic manipulative techniques (OMT), such as direct myofascial release, counterstrain, and muscle energy.[7]

Incorporating mindfulness meditation into the patient's care plan is pivotal in addressing chronic pain. Mindfulness practices, rooted in awareness and acceptance of the present moment, have effectively reduced pain intensity, and improved overall well-being.[8] Coupled with narrative medicine, which involves the patient's storytelling and reflection, mindfulness becomes a powerful tool for exploring pain's emotional and psychological dimensions. This combination facilitates a deeper understanding of the patient's narrative, fostering resilience and promoting positive changes in coping mechanisms.

As we navigate the complex landscape of managing chronic pain, it is crucial to adopt a patient-centered approach--this involves recognizing and addressing the various aspects of pain through biopsychosocial, transdisciplinary, osteopathic, and holistic perspectives to develop a more comprehensive and tailored strategy. The ultimate goal is to provide long-term relief and enhance the overall quality of life for individuals dealing with the complexities of chronic pain. This case demonstrates the intricate relationship between adverse childhood experiences, challenges in making surgical decisions, and the potential benefits of using osteopathic and holistic approaches to manage chronic pain.

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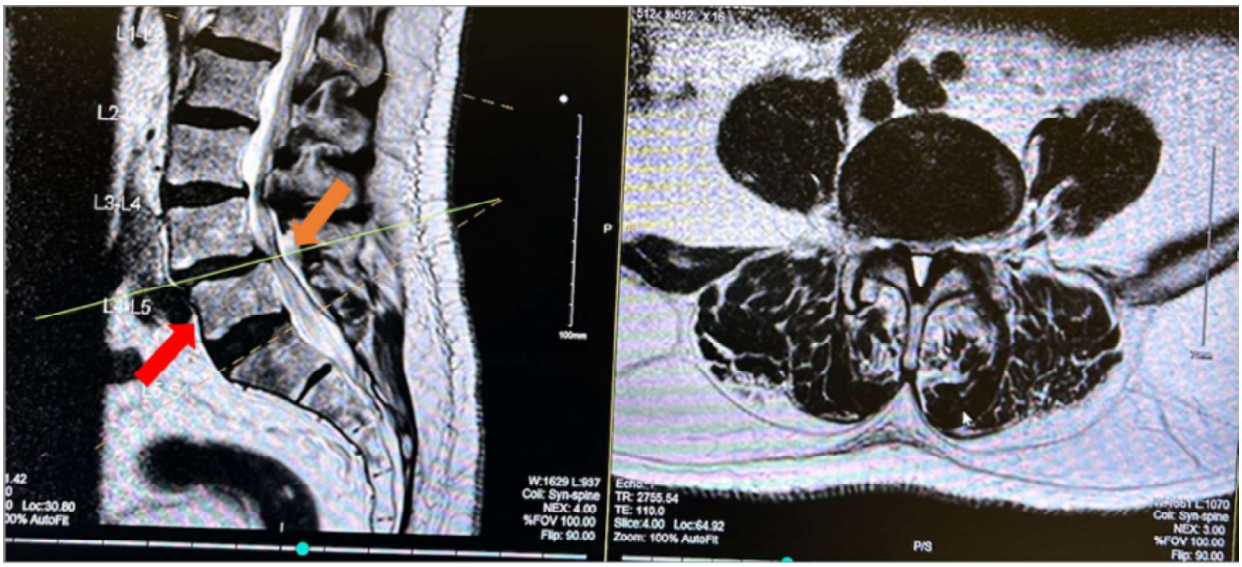
Graphic Elements



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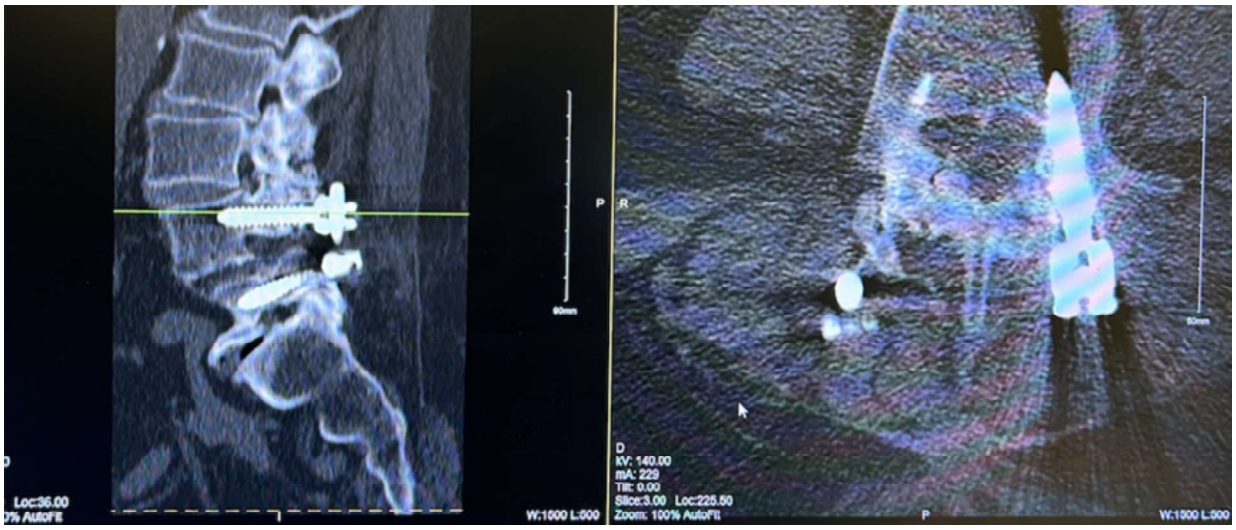

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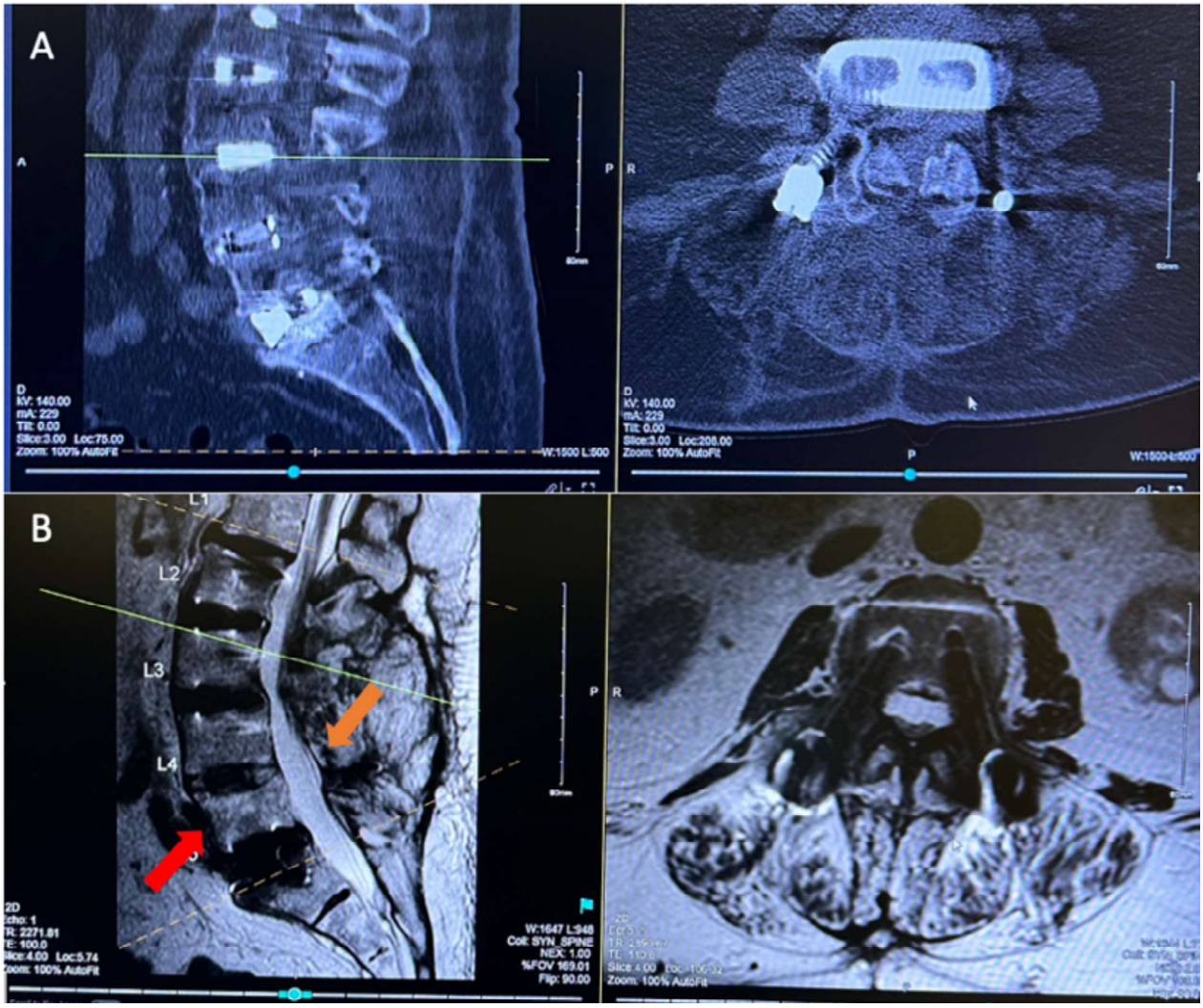

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