

Treatment options for patients suffering from failed back surgery syndrome

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Dear Editor,

Failed back surgery syndrome (FBSS) is a condition that is commonly encountered by chronic pain physicians. The condition is defined by the International Association for the Study of Pain as "lumbar spinal pain of unknown origin either persisting despite surgical intervention or appearing after surgical intervention for spinal pain originally in the same topographical location" [1]. This condition is challenging as the cause and diagnosis can be multifactorial. FBSS may arise from surgery that exacerbated the initial pain condition, the surgery may have been ineffective in alleviating the pain condition, or the pain may even be a new condition that occurred after the surgery [2].

Treatment options for patients suffering from FBSS include conservative measures as well as interventional management. Conservative therapies include physical therapy, cognitive behavioural therapy, pain psychology, and medication management. Conservative therapy is a safe initial option and should generally be recommended first. A physical therapy referral or continuation of ongoing treatment should be encouraged in most patients. In regards to medication management, common treatments include acetaminophen, non-steroidal anti-inflammatory drugs (NSAIDs), anticonvulsants, antidepressants, and opioids [3, 4].

If conservative therapy fails, interventional treatment may be considered depending on the aetiology of the patient's pain condition. Epidural

steroid injections and medial branch blocks are commonly tried depending on the pain characteristics. Neuromodulation, such as spinal cord stimulation (SCS), is another rapidly expanding therapy for the treatment of FBSS. SCS therapy has the advantage of a percutaneous trial phase before pursuing a more extensive operation or permanent implant. There is convincing evidence demonstrating the usefulness of SCS for FBSS as well as a variety of other pain conditions [5–8]. Additionally, there is evidence that SCS therapy may be more beneficial than reoperation in some patients [9].

Finally, there are patients who may require reoperation for some circumstances. Surgical referral should be considered for patients suffering from symptoms of motor weakness, bowel/bladder issues, or other neurological deficits. Additionally, surgery should be considered for patients with clear evidence of structural issues identified on imaging that may be amenable to surgical intervention [1, 2].

FBSS can be a difficult condition for physicians to evaluate and treat given the complexity of the pain complaints. Physician anaesthesiologists with an interest in pain management should be well trained and educated in both the recognition and treatment options for this challenging condition.

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REFERENCES

1. Baber Z, Erdek MA. Failed back surgery syndrome: current perspectives. *J Pain Res* 2016; 9: 979-987. doi: 10.2147/JPR.S92776.
2. Miller B, Gatchel RJ, Lou L, Stowell A, Robinson R, Polatin PB. Interdisciplinary treatment of failed back surgery syndrome (FBSS): a comparison of FBSS and non-FBSS patients. *Pain Pract* 2005; 5: 190-202. doi: 10.1111/j.1533-2500.2005.05304.x.
3. Desai MJ, Nava A, Rigoard P, Shah B, Taylor RS. Optimal medical, rehabilitation and behavioral management in the setting of failed back surgery syndrome. *Neurochirurgie* 2015; 61: S66-76. doi: 10.1016/j.neuchi.2014.09.002.
4. Amirdelfan K, Webster L, Poree L, Sukul V, McRoberts P. Treatment options for failed back surgery syndrome patients with refractory chronic pain: an evidence based approach. *Spine* 2017; 42: S41-52. doi: 10.1097/BRS.0000000000002217.
5. Kumar K, Taylor RS, Jacques L, Eldabe S, Meglio M, Molet J, Thomson S, O'Callaghan J, Eisenberg E, Milbouw G, Buchser E. Spinal cord stimulation versus conventional medical management for neuropathic pain: a multicentre randomised controlled trial in patients with failed back surgery syndrome. *Pain* 2007; 132: 179-188. doi: 10.1016/j.pain.2007.07.028.
6. Falowski S, Sharan A. A review on spinal cord stimulation. *J Neurosurg Sci* 2012; 56: 287-298.
7. Kapural L, Narouze SN, Janicki TI, Mekhail N. Spinal cord stimulation is an effective treatment for the chronic intractable visceral pelvic pain. *Pain Med* 2006; 7: 440-443. doi: 10.1111/j.1526-4637.2006.00165.x.
8. Hasoon J, Berger AA, Urits I, Orhurhu V, Viswanath O, Aner M. Spinal cord stimulation for the treatment of chronic pelvic pain after Tarlov cyst surgery in a 66-year-old woman: A case report. *Case Rep Womens Health* 2020; 25: e00171. doi: 10.1016/j.crwh.2020.e00171.
9. North RB, Kidd DH, Farrokhi F, Piantadosi SA. Spinal cord stimulation versus repeated lumbosacral spine surgery for chronic pain: a randomized, controlled trial. *Neurosurgery* 2005; 56: 98-107. doi: 10.1227/01.neu.0000144839.65524.e0.