

IS LATE DECOMPRESSION SURGERY VIABLE IN TREATING TRAUMATIC SPINAL CORD INJURY? A CASE OF EXTENSIVE NEUROLOGICAL IMPROVEMENT AFTER LATE DECOMPRESSION SURGERY

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Introduction: Traumatic spinal cord injury proves difficult to treat often leading to poor prognosis with significant physical, psychological, and socioeconomic burden. There are growing evidence that early surgical decompression in patients with traumatic spinal cord injury has significant neurological outcome in contrast to late decompression surgery. We hereby present a case of traumatic cervical spinal cord injury with cervical spinal stenosis who had an extensive neurological improvement post late decompression and instrumentation surgery.

Discussion: A 68-year-old Chinese male with no known medical illness presented to our centre after a hyperextension injury following a fall at his workplace. He sustained a C3/C4 cervical spine injury with multilevel cervical spinal stenosis with associated cord oedema (ASIA A). After 6 days, the patient underwent a posterior spinal instrumentation and fusion of C3 to C7 and laminectomy of C4 to C6. Post operatively, the neurological status remained the same. The patient was sent to rehabilitation centre for rehabilitation and training. During his 4 months follow-up, he demonstrated significant neurological improvement. There is improvement of power of grade 3 for bilateral upper limb and grade 2 bilateral lower limb with an intact sensory function (ASIA C)

Conclusion: Early decompression surgery for patients with traumatic spinal cord injury remains the gold standard in our current practice. However, this case is far from ideal with many barriers restricting early decompression. There is still lacking evidence to show the effectiveness of late decompression surgery and will require higher-level studies. As seen from our case, it seems that late decompression surgery does confer a significant neurological outcome. Hence, decompression surgery even in the late stages may benefit patients and is ethically acceptable to provide a fighting chance for a better outcome clinically and socioeconomically.