



INTRODUCTION

There has been limited progress in developing non-opioid medications for acute perioperative pain. Suzetrigine (VX-548) is a selective sodium channel blocker that targets Nav1.8, expressed in peripheral nociceptive neurons (Jones, 2023). Recently approved by the US Food and Drug Administration for acute postoperative pain (Keam, 2025), suzetrigine offers an alternative to opioids, which, despite their effectiveness, carry many risks. Clinical trials show that suzetrigine reduces moderate-to-severe acute pain comparably to hydrocodone/acetaminophen, with a better safety profile due to peripheral rather than central location of action (Bertoch, 2025). We present a case of acute postoperative pain in a patient with chronic pain and bilateral above-knee amputations (AKAs) who responded well to suzetrigine in the postoperative period.

MATERIAL AND METHODS

A case report. Patient informed consent was obtained for the submission of this case report. As the case report is devoid of patient identifiable information, it is exempt from IRB review requirements as per Walter Reed National Military Medical Center (WRNMMC) policy.

MECHANISM OF ACTION

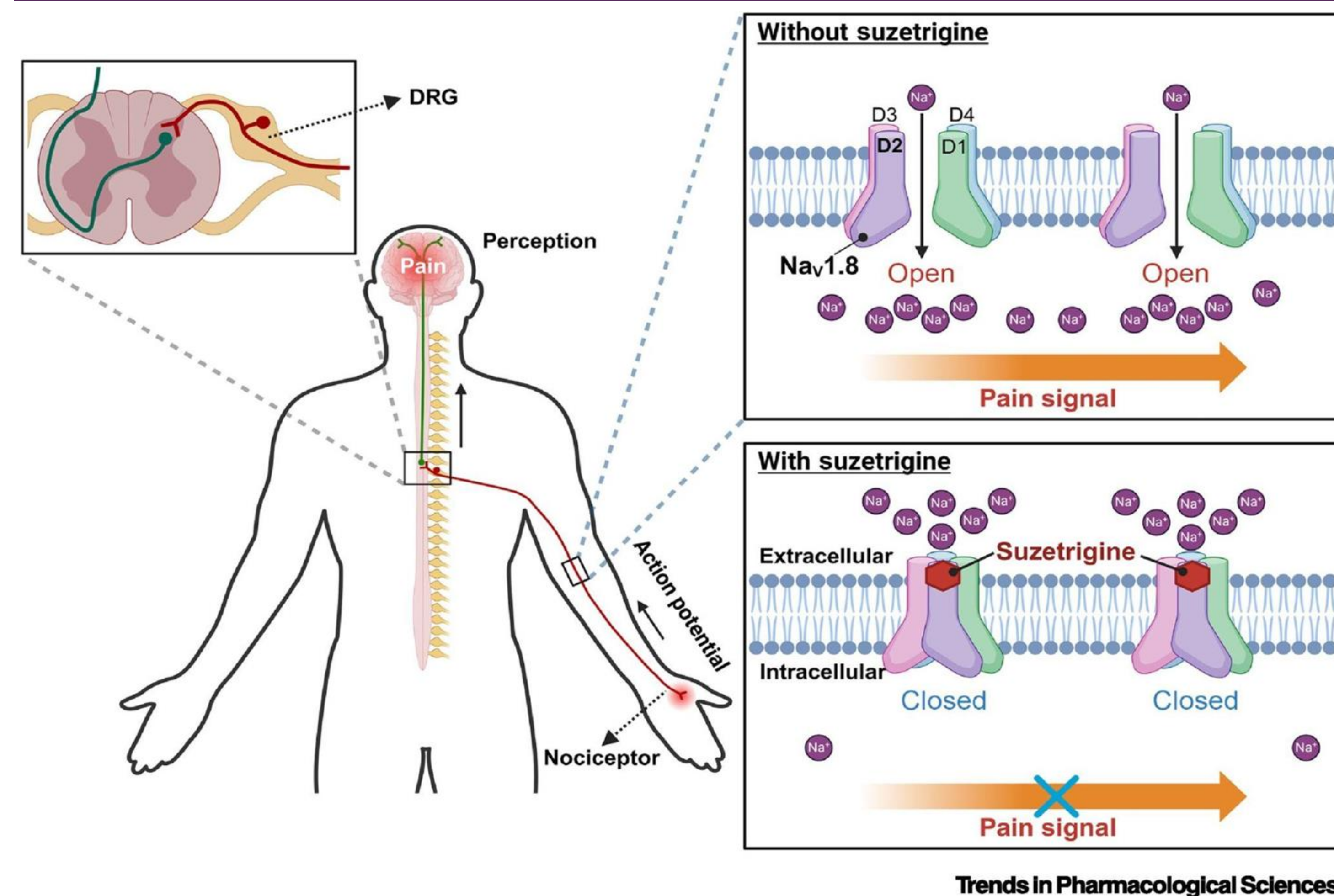


Image 1. This is an annotated image from Cho et. al. showing the mechanism of action of suzetrigine and how it prevents depolarization of the nerve relaying the pain signal to the CNS.

CASE PRESENTATION

A 51-year-old male with a complex history of bilateral AKAs was admitted to WRNMMC for left AKA revision in June 2025. He underwent a left AKA in March 2025 due to limited ankle range of motion and complex regional pain syndrome, later complicated by osteomyelitis, requiring multiple surgeries. His history includes chronic opioid use and dependence, which he discontinued before his left AKA procedure. He has had a dorsal root ganglion stimulator since 2017 and an Abbott spinal cord stimulator since 2018, both providing minimal relief despite multiple lead revisions. An extensive psychiatric history further limited his pain management options. While inpatient, he received a 100-mg oral loading dose of suzetrigine, followed by 50 mg every 12 hours for 2 weeks. Multimodal perioperative pain control included a preoperative single-shot left subgluteal sciatic block, left femoral nerve catheter, oral and intravenous hydromorphone, pregabalin, acetaminophen, methocarbamol, marinol, and cryoneurolysis. He was discharged on postoperative day (POD) 2 with minimal pain. His baseline pain prior to admission was 6–10/10 on a Pain Numeric Rating Scale. On POD 6, he reported stopping oral hydromorphone on POD 4 with his pain at 0/10. By POD 19, his pain remained at 0/10 on marinol, acetaminophen, pregabalin, and celecoxib. 3 months postoperatively the patient reports having no chronic pain and no acute pain while walking with his new prosthetic. The patient also notes not taking any pain medications including opioids, marinol, pregabalin, or celecoxib since POD20.



DISCUSSION

This report describes the use of a novel drug for acute postoperative pain. While opioids have been the standard treatment for acute pain, this drug has shown similar efficacy to hydrocodone/acetaminophen in reducing moderate-to-severe pain in a 48-hour postoperative period. It has been most extensively studied in patients undergoing abdominoplasty and bunionectomy. This case involves a chronic pain patient who responded well to suzetrigine during the acute postoperative period after multiple AKA revisions. This suggests the potential for suzetrigine to provide excellent acute and chronic pain relief in chronic pain patients in the immediate postoperative period. However, it cannot be definitively stated that suzetrigine was the only factor that attributes to his improvement in pain level during the acute postoperative period. The largest confounding factors in this case include the cryoneurolysis performed and revision surgery itself.

CONCLUSION

- Further studies are needed to validate its effectiveness outside the acute postoperative period, to explore its role as part of a multimodal chronic pain regimen, and possible synergistic effects it has with other pain medications and procedures.
- Suzetrigine offers a possible viable alternative to opioids for patients with acute postoperative pain that have contraindications to opiate administration or a history of dependence.

REFERENCES

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