# Buprenorphine Use for Chronic Pain Management in a High Fall-Risk Patient: A Case Report

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## Introduction

Buprenorphine acts as a partial agonist at the mu-opioid receptor. Therefore, it is less likely to cause significant drowsiness or respiratory complications that can lead to falls, particularly when compared to full opioid agonists like oxycodone.

## Case Description

We present the case of a 64-year-old, 140-pound male, a former financial planner, who has been experiencing recurrent falls due to cerebellar ataxia. These falls have led to repeated orthopedic injuries, which have consistently been managed conservatively as the patient is not a candidate for surgery. He sought pain management to explore alternative medication options to his current regimen, which included celecoxib 200 mg daily and tramadol 100 mg every six hours. Initially, it was recommended that he discontinue tramadol and begin tapentadol extended-release (ER) 150 mg twice daily. Two months later, the patient reported experiencing some additional benefit from the extended-release tapentadol and expressed a desire to continue at the current dose. Shortly after this visit, he sustained another orthopedic injury and was then prescribed oxycodone 10 mg every six hours in addition to tapentadol 150 mg ER twice daily. However, the tapentadol was eventually discontinued due to lack of insurance coverage.

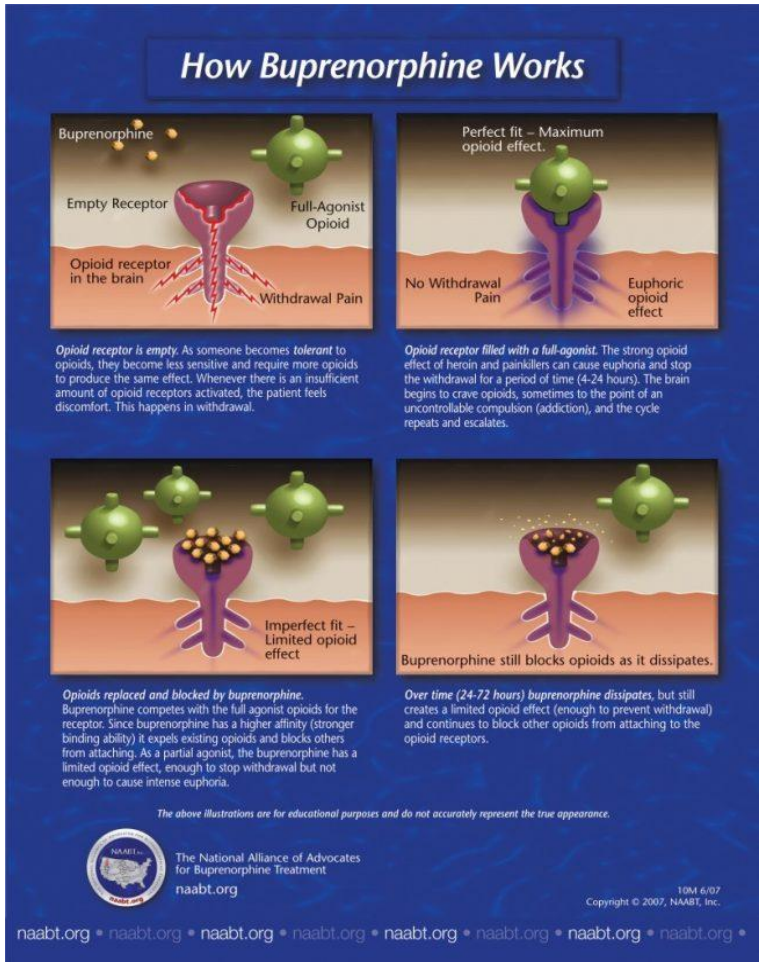


Figure 1. Pharmacology of Buprenorphine

## Discussion

During a follow-up appointment several weeks later, the patient reported that he could not tolerate oxycodone as it made him feel unsteady. Given his positive response to the extended-release tapentadol and inability to tolerate oxycodone, he was started on buprenorphine sublingual 1.4 mg every 12 hours, aiming to provide longer-term, 24-hour pain control with fewer equilibrium disruption. During an office visit eight weeks later, the patient reported experiencing minor breakthrough pain, which required more frequent use of Celecoxib. Consequently, his buprenorphine dosage was increased to 2.9 mg with desired effects.

## Conclusion

Buprenorphine can be used to provide longer-lasting pain relief while minimizing the risk of sedation, thereby reducing the likelihood of falls.

## References

1. *Suboxone pharmacology.* Advanced Pain Management Clinic. (2022, April 22). https://advancedpainmanagementclinic.com/suboxonedoctorsjacksonvilleflorida/suboxone-pharmacology/