

First, Do No Harm: Buprenorphine Use for Pain Associated with Chronic Diseases

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Background: The Centers for Disease Control and Prevention has reported that 6 in 10 adults in the United States have a chronic disease. Pain is often associated with chronic diseases, and in the past patients have often been treated with opioid medications for adequate relief. However, given the burgeoning literature on the opioid epidemic, previous prescribing practices are being called into question. This is especially true given the morbidity and mortality associated with this epidemic, including, and not limited to the development of dependence, opioid use disorder and a significant number of deaths secondary to opioid overdose. What is particularly concerning about these findings is the extent to which this epidemic has been found to be iatrogenic in etiology. This raises the cost benefit analysis that occurs when one prescribes opioid medications for patients, particularly how to balance the principal of doing no harm with ensuring appropriate pain control for patients with chronic disease? This case report will explore the use of buprenorphine, a partial opioid agonist for pain control as opposed to the use of a conventional, full opioid agonist, for optimal pain control during hospitalization.

Case Presentation: This is the case of a 31-year-old patient with a past medical history of chronic abdominal pain in the setting of Type I Diabetes Mellitus with associated dysautonomia and End Stage Renal Disease with treatment resistant hypertension. The patient had presented to the hospital approximately 216 known times, in the last 10 years. The patient had a cycle of presenting to the hospital with chronic abdominal pain and receiving treatment with opioids. At the time, the patient was seen, she met at least 7-8 DSM-5 criteria, consistent with a diagnosis of Severe Opioid Use Disorder. Given the challenges associated with this treatment history, the patient was offered to discontinue all full agonist opioid medications and instead start a partial opioid agonist. Buprenorphine was initiated for chronic pain disorder and concomitantly used for opioid withdrawal and opioid use disorder. The patient received adequate pain control while hospitalized with buprenorphine as the sole pain medication. In addition, the patient's affect and orientation improved. Blood pressure values also were found to dramatically decrease.

Conclusion: This case report adds to the growing literature that has studied buprenorphine as an effective medication for chronic pain control. Furthermore, due to the mechanism of action of buprenorphine as an opioid partial agonist, its use can avoid some of the risks associated with full opioid agonists, including dependence, addiction, opioid use

disorder and death secondary to overdose. This case also opens the discussion for the use of buprenorphine for pain in other chronic diseases, including sickle cell disease (1,2).

References

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