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Opioid use for acute pancreatitis: Toward a research agenda to optimize patient safety

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Wu et al[1] present findings of a retrospective cohort study of opioid use among acute pancreatitis (AP) patients hospitalized in an integrated healthcare system. The authors aimed to describe overall usage patterns and factors associated with increased opioid use during early (within 12 hours) AP management. They also investigated the impact of early opioid use on length of stay and persistent use following discharge. Overall, 80% of patients in this cohort received opioids during the initial stages of hospitalization. As expected, opioid receipt varied significantly by patient pain score, systemic inflammation, and etiology; however, it also varied by race/ethnicity, sex, and facility where care was received. Increased opioid utilization during the initial 12 hours of hospitalization was an independent risk factor for longer length of stay. Approximately 51% of patients received opioids at discharge, and almost 10% went on to become persistent opioid users 3-6 months following hospitalization.

Acute pancreatitis, as the authors note, is a leading cause for hospitalization due to a digestive disease in the United States, resulting in over 275,000 hospital admissions annually.[2] Most AP patients experience severe abdominal pain, and opioid-based analgesia has been a cornerstone of pain management. However, patterns of opioid use and the subsequent impact of opioid use—including safety outcomes such as unsafe use or adverse events—remain unclear. This study begins to unpack these issues. Despite potential limitations in the way opioid use was measured and the uncertainty of whether the findings truly reflect opioid use today for AP, to our knowledge, this is the first broad evaluation of inpatient and outpatient opioid use that accounts for a racially/ethnically diverse population of AP patients. The study is strengthened by a relatively large sample size and comprehensive dataset that allowed the authors to explore the nuances of opioid use across facilities.

Although opioids are frequently utilized in AP, chronic use is rarely recommended for chronic pancreatitis.[3] One of the most concerning findings emerging from this study is that 10% of opioid-naïve AP patients became persistent users, receiving opioids 3-6 months

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following discharge. It is well established that persistent opioid use is supported by limited clinical evidence and is associated with poorer patient outcomes.[4] It also raises concerns unique to the safety of patients with gastrointestinal (GI) diseases: high rates of opioid misuse have been documented among individuals with GI diseases, including chronic pancreatitis,[5] who use opioids for prolonged periods. Moreover, persistent use can lead to serious adverse events, including bowel dysfunction and worsening abdominal pain, which may result in overtreatment of symptoms with further opioid escalation. Fewer studies have addressed the impact of opioid use for AP, but it is clear that we need to fully understand the benefits and risks of opioid use for this illness, and more importantly, minimize persistent use.

Ultimately, Wu et al underscore the need to build an agenda that guides future research on opioid safety in AP and supports efforts to translate those findings into safer care. This warrants a broader discussion that brings together the views of clinical experts, researchers, and patients. As a starting point, we hypothesize that many insights can be gained from opioid safety research outside of GI care,[6] and can be tailored to the needs of patients with AP. We propose 3 components for future research: (1) comprehensively evaluating opioid use and safety outcomes among AP patients; (2) developing evidence-based guidelines for providers who treat AP; and (3) designing and implementing patient-centered interventions that reduce opioid use. These efforts would be analogous to the robust work regarding post-surgical opioid use wherein safe opioid use is often required for acute pain, but carries a risk for unintended persistent use.

Changing patient safety outcomes will first require a cohesive evidence base that tracks current opioid use among patients with AP. Using prescription drug monitoring tools and electronic health record data, future studies might include larger rigorous examinations of opioid use that address the variation in utilization and factors linked with persistent use. Given this study's findings, there is a need to quantify the proportion of AP patients that develop chronic pain (presumably chronic pancreatitis) before we can develop structured mechanisms to transition to non-opioid analgesia. Although challenging to measure, it will also be important to assess the occurrence of serious opioid-related adverse events among AP patients, particularly among persistent users. The authors note that there is a need for future analyses to account for duration of pain symptoms. Additionally, there may be scope to collect patient-reported outcomes and qualitative data to explore patient perceptions of pain symptoms and pain management experiences. Collectively, these elements may help to characterize key attributes that shape opioid use and should be integrated into intervention efforts.

As this study highlights, there are no clear guidelines for providers on appropriate opioid use to manage AP pain. The authors suggest that this may be one of the factors driving the variation in opioid prescribing in their analysis. In conjunction with opioid use monitoring, providers need protocols based on high-quality scientific evidence to guide their decision-making. Such guidelines should delineate, for example, when to begin, discontinue, or adjust opioid therapy; how to partner with patients to develop pain management plans; and what strategies they can use to address persistent use or adverse events.[6] Studies aimed at stratifying AP patients according to their pain management needs or risk of persistent use

may help to define optimal pathways to safely treat pain. Understanding providers' current practices to manage pain and minimize opioid use may also help underpin guideline development.

Our final recommendation is the careful design and implementation of patient-centered interventions to reduce opioid use. Multimodal approaches that actively engage patients and providers while promoting safer pain management are needed. Although limited data exist in the gastroenterology literature, prescription monitoring, audit-and-feedback, and self-management/lifestyle interventions have shown some promise in reducing opioid use among GI patients. These strategies should be investigated to understand their potential benefits, particularly to reduce persistent use, following AP. We should also look to surgery and other clinical areas to identify possible solutions to enhance safety; adapting Enhanced Recovery Protocols to AP care may be especially valuable[7] as these are centered on increasing patient education, minimizing opioid use, and streamlining patients' recovery.

Until more data become available, we suggest that providers adhere to existing best practice to reduce persistent opioid use. Patients should be counseled about the risks and benefits of opioid use and, additionally, should be given early access to a comprehensive pain program that maintains a focus on the psychosocial aspect of illness. We suggest that providers consider the earlier introduction of non-opioid medications (such as pregabalin) for chronic pancreatitis. Finally, providers should be wary of a reflexive "refill" of opioids, and should instead reconsider alternative options and potential opioid-reduction interventions.

Wu et al[1] make an important contribution to our knowledge of opioid use among AP patients. They also raise an opportunity to develop future research directions. Our hope is that this work facilitates a productive discussion on the next steps to optimize pain management and patient safety in AP care. Given the harms associated with opioid use on GI function, lessons learned may be applicable beyond AP to enhance the safety of patients with other GI diseases.

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