SHOULD BUPRENORPHINE FOR OPIOID SUBSTITUTION THERAPY BE CONTINUED DURING THE PERIOPERATIVE PERIOD? A SYSTEMATIC REVIEW

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Introduction and Aims: Opioid substitution therapy with buprenorphine (± naloxone) is on the rise in Australia. Acute pain management in such patients is complicated by pharmacological and addiction-related factors, as well as inconsistent recommendations presented in literature reviews and expert commentaries. Thus, this study aims to summarise current evidence to guide the decision to continue or cease buprenorphine opioid substitution therapy perioperatively.

Method: A systematic review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Primary literature investigating perioperative pain management in buprenorphine substitution therapy patients, published from 2006-2016 were retrieved through MEDLINE and Embase. Papers investigating buprenorphine in chronic pain patients were excluded, as were literature reviews and opinion papers that presented no new data. Two researchers independently screened all citations with discrepancies resolved via consensus. Quality assessment of relevant studies was conducted using the Risk of Bias Assessment Tool for Nonrandomized studies (RoBANS).

Results: Seventy-two articles were initially identified. After excluding duplicates and reviewing against study inclusion/exclusion criteria 6 articles remained, including 3 case reports (n=5) and 3 retrospective cohort controlled studies (n=105). RoBANS tool indicated an overall medium risk of bias. The three cohort controlled studies and three case reports documented safe and effective use of buprenorphine prior to, during and post-surgery. One cohort study clearly reported reduced opioid requirements in patients who continued buprenorphine opioid substitution therapy perioperatively compared to those who did not.

Conclusions: Buprenorphine can be safely continued in opioid substitution patients throughout the perioperative period.

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