

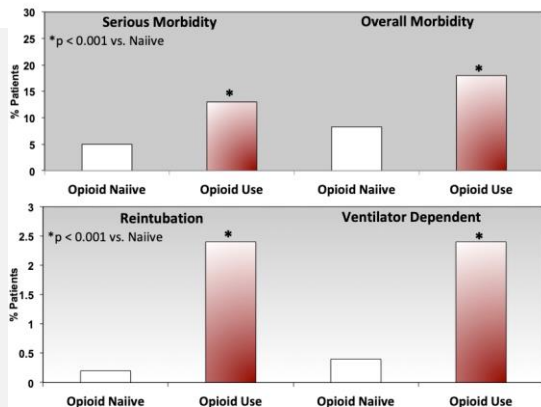


Preoperative Substance Use: Influence on Abdominal Surgical Outcomes



- Preoperative opioid use has been shown to be associated with worse outcomes after surgery
- Little is known about the affect of preoperative benzodiazepines with and without opioids

- Preoperative opioid use, but not benzodiazepines, was an independent risk factor for postoperative morbidity
- Patients on preoperative opioids and benzodiazepines had significantly increased operative time and length of stay



Multivariable regression for Serious Morbidity

Variable	Odds ratio	95% CI	p Value
Preoperative Opioids	2.47	1.51-4.02	< 0.001
ASA Class 3-5	2.19	1.35-3.58	0.002
Current Smoker	1.82	1.10-3.00	0.020
Diabetes Mellitus	1.50	0.88-2.55	0.139
Age >65	1.31	0.82-2.10	0.266
Preoperative BDZ	1.26	0.65-2.45	0.487
BMI >30	0.97	0.63-1.49	0.892
Hypertension	0.74	0.46-1.20	0.222
Female	0.68	0.45-1.04	0.074

*Results of backward stepwise multivariable logistic regression
 ASA = American Society of Anesthesiologists, BDZ = Benzodiazepines, BMI = Body mass index

Data Source/Population and Results:

- ACS NSQIP data from 2019 was linked with custom substance abuse variables created by the Pennsylvania NSQIP Consortium (PANC), a regional NSQIP collaborative
- Patients undergoing abdominal surgeries including ventral hernia, colectomy, hysterectomy, cholecystectomy, appendectomy, nephrectomy and hiatal hernia

Total Cohort	N = 1,655
Age, median y	56
Female %	61
Race, white %	69
BMI, median, kg/m ²	29.2
ASA Class >3 %	46
Preoperative Opioids, n (%)	209 (13)
Preoperative BDZs, n (%)	135 (8.2)
Preoperative Opioids/BDZ, n (%)	42 (2.5)
Multi-modal pain management, n (%)	1,109 (67)
Opioid prescription on discharge, n (%)	1,351 (82)

Lessons Learned

- Patients on preoperative opioids are more likely ($p < 0.05$) to be female and older compared to opioid naïve patients
- Overall morbidity, serious morbidity, operative time, organ space infections, ventilator dependence, operative and length of stay were all significantly ($p < 0.05$) in patients on opioids

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