

BACKGROUND

- Opioid stewardship in orthopaedic surgery is critical to help curb the US opioid epidemic.
- Few studies examine risks for excess opioid use after Thumb Basal Joint Arthroplasty (BJA), a common hand surgery.
- Prescription Drug Monitoring Programs (PDMP) accurately record patient prescription patterns.
- Using PDMP, we identified risk factors for filling a second prescription and/or prolonged opioid use (filled prescription > 6 months postop) after BJA.

METHODS

110 Patients

- 139 consecutive patients undergoing thumb BJA.
- 29 excluded due to: concomitant surgery, no postop opioids, or no PDMP data.

PDMP Data (Prescription Data)

- Reviewed 6 months preop to 9 months postop.
- Recorded 4 Medication Types: Stimulants, Benzodiazepines, Sedative/hypnotics, and Opioids.
- Patients grouped into either 1) exposed or 2) naïve based on preoperative filled prescriptions.

Analysis

- Demographic/clinical factors and prescription use.
- Multivariate logistic regression to find predictors of excess opioid use, as previously defined.

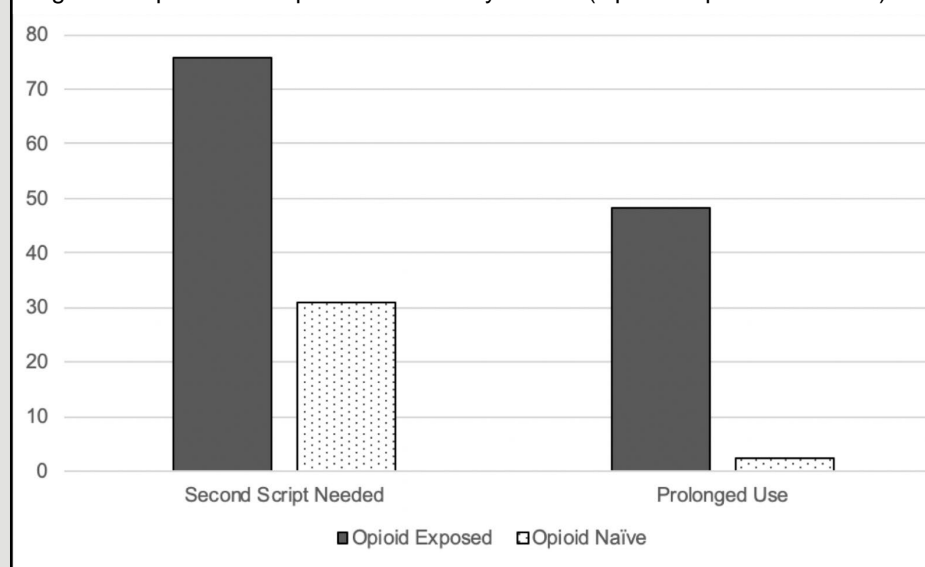
RESULTS

Table 1: Patient Demographic Factors

<u>Age</u>	64.05 +/- 8.6 (41-84)
<u>BMI</u>	28.5 +/- 6.2 (18.5-44.9)
<u>Sex</u>	
Female	80/110 (72.7%)
Male	30/110 (27.3%)
<u>Race</u>	
White	104/110 (94.5%)
Black	3/110 (2.7%)
Native Hawaiian	1/110 (0.9%)
Other	2/100 (1.8%)
<u>Elixhauser Comorbidity Scale (%)</u>	80.37 +/- 4.49 (60.2-85.2)
<u>Government Insurance</u>	37/110 (33.6%)

BMI=Body Mass Index, CI=Confidence Interval

Figure 1: Opioid Prescriptions and Use by Cohort (Opioid Exposed vs Naïve)



RESULTS CONT.

Table 2: Multivariate Predictors of Second Opioid Prescription and Prolonged Use

<u>Predictor</u>	<u>Second Prescription</u>			<u>Prolonged Use (>6 mo)</u>		
	<u>Odds Ratio</u>	<u>95% CI</u>	<u>P Value</u>	<u>Odds Ratio</u>	<u>95% CI</u>	<u>P Value</u>
Sex	0.59	0.22-1.59	0.294	--	--	--
Govt. Insurance	1.53	0.62-3.77	0.301	--	--	--
Opiate Exposed	5.98	2.20-16.29	<0.001	102.32	9.56-1094.74	<0.001
Follow-up Time (Weeks)	1.03	1.00-1.06	0.031	1.00	0.96-1.05	0.923
Postoperative Complication	--	--	--	11.3	0.87-146.81	0.064
BMI	--	--	--	1.11	0.99-1.24	0.066
Postoperative Opioid 75 th ile (MME > 150)	--	--	--	6.90	0.81-58.67	0.077

BMI=Body Mass Index, CI=Confidence Interval

CONCLUSIONS

- Only preoperative opioid use associated with filling second opioid prescription and prolonged use.
- Initial surgeon-provided script did not correlate with filling additional scripts (lower initial doses feasible).
- Opioid-naïve patients often fill second scripts via outside providers (more communication needed with non-surgical providers).