UNC GREENSBORO
School *of* Nursing

Analgesia for SUD Patients Using Opioid Sparing Medications

Jason Mitchell, BSN, RN, SRNA

PURPOSE

PRIMARY AIM

-Assess provider confidence for using opioid sparing anesthesia when treating patients with active SUD or recovering from SUD

SECONDARY AIM

-Identify possible barriers to implementing opioid-sparing anesthesia techniques perioperatively

-Identify if anesthesia providers believe opioid sparing medications provide adequate analgesia for SUD patients

-Develop educational module, protocol, and opioid sparing tool for anesthesia providers to use for patients with SUD

BACKGROUND & RESEARCH

-Opioid abuse is a national epidemic that accounted for an estimated 80,000 deaths in 2021

-16,000 deaths from prescription opioid overdoses

-An estimated 1 in 16 surgical patients become chronic opioid users

-An estimated 22 million Americans are currently in the recovery process of substance use disorder

-Many of these people will need surgery at some point in their lifetime, and will require pain control perioperatively

-Unwanted perioperative side effects of opioid administration include; nausea, vomiting, respiratory depression, pruritus, urinary retention, excessive sedation, ileus, hyperalgesia, and immunosuppression, and increased hospital stays

METHOD

-Quantitative pre/post intervention evidence-based project.

-Convenience sampling of 30 anesthesia providers at a suburban hospital that offers 10 operating rooms, 2 procedure rooms, 1 cystoscopy room with surgical services ranging from general surgery to plastics, ortho, and cardiovascular.

-Likert scale pre and post surveys

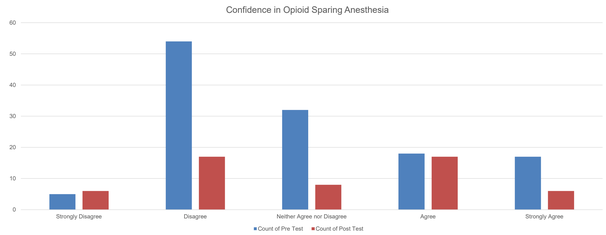
-Questions ranged 1-5 with 1 representing strongly disagree and 5 representing strongly agree

-Pre surveys were emailed prior to in educational session

-Presentation provided in person and opioid-sparing reference tool was provided

-Post presentation surveys then sent with gift cards provided for completion

-Independent t-test data analysis



RESULTS

-No significant difference (p-value = 0.615) between overall pre-test and post test data

-Perceived limited exposure to SUD patients was a factor for anesthesia providers

-No significant difference (p-value= 0.829) between pre and post test surveys if providers felt opioid sparing anesthesia would help to provide analgesia for patients with active SUD

-No significant difference (p-value = 0.332) between pre and post surveys if providers felt opioid sparing anesthesia would help to provide analgesia for patients recovering from SUD

DISCUSSION

-Low participation retention from pre to post survey (47%)

-No significant results

-Most participants did not feel as though they cared for patients with SUD frequently

-Some participants noted that they do not utilize opioid sparing techniques frequently

-Participants believed the presentation and reference guide were educational

CONCLUSIONS

-Future education should consider cost for adjunct medications as a factor for provider usage

-Future research should include regional anesthesia as an option for opioid sparing techniques to limit opioid usage

-Future education should include more in-person presentation sessions to encourage participation retention

PRE-OPERATIVE	INTRA-OPERATIVE		POST-OPERATIVE
	Induction	Maintenance	
Consider Regional or Local Anesthetics			Ondansetron 0.15mg/kg -> 8mg
Acetaminophen 15mg/kg -> 1000mg PO/IV	Ketamine 0.3-0.5mg/kg	0.25mg/kg/hr	Ketorolac 0.5mg/kg -> 30mg (if other NSAIDs not given)
Celecoxib 6mg/kg -> 400mg PO	Lidocaine 1mg/kg	1.5mg/kg/hr	Standard post-operative medications
Pregabalin 5mg/kg -> 150mg PO	Decadron 0.2mg/kg	N/A	
OR	Dexmedetomidine 0.5-1mcg/kg	0.4mcg/kg/hr	
Gabapentin 15mg/kg -> 600mg PO	Magnesium 30mg/kg-> 2g single dose	**OR** 5-20mg/kg/hr	

REFERENCES

SCAN ME