Managing Substance Use Disorder in the Perioperative Setting

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In the setting of the opioid crisis, more patients will present for surgery with opioid use disorder (OUD). Some patients may be in recovery and receiving methadone or buprenorphine. Others present an opportunity to initiate treatment. Anesthesiologists have the skill set and opportunity to influence outcome with this challenging patient population. During the perioperative period, patients with OUD actively using drugs are removed from their drug environment and may see an opportunity for change. Buprenorphine induction can save lives. Remember that the greatest signal for death in the OUD population is in the first month following a hospitalization.

CASE 1: A 32 y.o. presents with a history of SUD in recovery currently taking Suboxone 8 mg BID daily. He is scheduled for an ACL repair following an acute injury. How will you instruct him to manage his Suboxone? Design an anesthetic and analgesic plan complete with return to his addiction specialist.

CASE 2: A 36 y.o. presents with an epidural abscess and active opioid abuse with heroin and fentanyl. Discuss case management including considerations for opioid withdrawal management, pain management and methadone vs. buprenorphine incorporation. What are the hazards of methadone? How can buprenorphine be initiated in this setting.

Case 3: A 50 y.o presents for laparoscopic hemicolectomy for tumor. She has a history of fibromyalgia, depression, PTSD, distant opioid use. Upon further discussion, she discloses that she uses marijuana daily for pain and anxiety. Do you routinely screen for cannabis use? Would you have additional questions? If this is the morning of surgery, would you proceed? How would you advise her about using cannabinoids after surgery?

Suggested reading:

Kohan I, Potru S, Viscusi ER. Buprenorphine management in the perioperative period: educational review and recommendations from a multisociety expert panel. Reg Anesth Pain Med 2021;0:1–20. doi:10.1136/rapm-2021-103007

Anderson TA et al. Anesthesiology 2017; 126:1180-1186

Greenwald, M.K. et al. Effects of Buprenorphine Maintenance Dose on μ- opioid receptor availability. Neruopharmacology (2003) 28, 2000-2009

British Journal of Anaesthesia, 123 (2): e333ee342 (2019)

Jonan A et al. Pain Physician 2018; 21:E1-E12

Macintyre PE et al. Anaesth Intensive Care 2013; 41:222-230

Englander et al. J Hosp Med. 2017 May; 12(5): 339–342

White S et al. Drugs-Related Death Soon after Hospital-Discharge among Drug Treatment. Clients. PLoS One. 2015; 10(11): e0141073

Shah S, Schwenk ES, Sondekoppam RV, Clarke H, Zakowski M, Rzasa-Lynn RS, Yeung B, Nicholson K, Schwartz G, Hooten WM, Wallace M, Viscusi ER, Narouze S. ASRA Pain Medicine consensus guidelines on the management of the perioperative patient on cannabis and cannabinoids. *Reg Anesth Pain Med* 2023 Mar;48(3):97-117