Case: GP was a 53-year-old female with a history of AML, chronic pain, anxiety and depression who was known to the outpatient palliative care program. She was seen by our inpatient palliative care consult service during an admission for altered mental status and acute kidney injury (AKI) due to tumor lysis syndrome. Prior to admission her home pain medication regimen consisted of MS Contin 30mg po q8hrs, oxycodone 10mg po q6hrs prn, and pregabalin 225mg bid for “all over” somatic pain and neuropathy. She was also on clonazepam 1mg tid for anxiety. In view of her altered mental status and AKI, the MS Contin was held and the pregabalin and clonazepam dosages were reduced. Oxycodone 10mg was made available on a prn basis. During her stay, her family members expressed concern to our team that she had been overusing her opioids and benzodiazeptines at home. They said she was sedated at home and spent most of the time sleeping. They also reported a remote history of a suicide attempt with medications.

In light of the concerns, the patient’s long-acting opioid was not restarted and the goal was to continue weaning her opioids and benzodiazeptines as an outpatient. We counseled the patient on the dangers of taking these medications and only wrote prescriptions for two weeks of oxycodone and clonazepam. The family was asked to remove all old medicine from the house.

Finally, the patient was given an intranasal naloxone kit and educated on how to administer it. We were unable to reach the family to provide that education to them before the patient was discharged.

Despite these efforts, the patient was readmitted a few weeks later after being found unconscious as a result of an apparent unintentional opioid overdose – EMS administered naloxone in the field and she regained consciousness.

Discussion: The patients seen by palliative medicine providers often have compelling reasons for treatment with opioid pain medications. However, opioids carry an inherent danger of overdose in all patients. In fact, opioid overdose has been the leading cause of injury-related death (surpassing motor vehicle accidents) since 2009 and deaths from opioid analgesic overdose quadrupled between 1999 and 2010.(1) One of the strongest risk factors for overdose is a history of prior overdose. Other risk factors include: (2-4)

- History of illicit opioid use, especially injected
- High-dose opioid prescription (>100mg of OME daily)
- Concurrent benzodiazeptine or alcohol use
- Recent release from opioid detox or from prison with opioid use disorder history
- Underlying pulmonary disease or sleep apnea

Recently, public health officials have suggested using naloxone to prevent accidental overdose. Naloxone is an opioid antagonist that can reverse the respiratory depressive effects of opioids and is potentially lifesaving in the event of overdose. Data on efficacy of naloxone kits is limited but generally positive. One study compared communities implementing education/naloxone programs versus those that didn’t and found that there was a “dose-dependent” trend; the more kits distributed in a community, the greater reduction in opioid overdose mortality.(5) A 2014 meta-analysis found that layperson administration of naloxone versus no layperson administration was associated with significantly higher odds of recovery from the event (odds ratio of 8.58).(6)

In most states, there exist standing orders allowing at-risk individuals or their family/friends to obtain these kits without a prescription. People who administer naloxone to a patient are immune from penalties for practicing medicine without a license under existing Good Samaritan laws.

The kits are available in two forms: intranasal and intramuscular. Education on their use typically takes from five to ten minutes, and videos and materials are available at www.prescribetoprevent.org. The intranasal naloxone kits are typically covered by insurance, although the nasal adapter is not included and costs about $5.00. For patients without insurance, the cost of the intranasal kits can vary greatly. The kits available at UPMC are approximately $65.00. However, some community programs such as Prevention Point Pittsburgh provide kits for free if patients attend an education session.

There is currently no consensus regarding which patients should receive these kits. Some suggest giving them to patients with the risk factors listed above along with other potential risk factors (e.g. patients suspected of abuse, patients on long-acting agents, etc.). Others argue that all patients on opioids should be co-prescribed a naloxone kit. In a non-randomized intervention study in six safety-net primary care clinics offering naloxone co-prescription for patients on long-term opioid therapy, patients who received naloxone prescriptions had 47% fewer opioid-related ED visits in the six months after getting the prescription and 63% fewer visits in one year than those who did not receive a prescription.

Resolution of Case: Upon readmission, our team continued to counsel GP about the dangers of prescription drug misuse and devised a plan for a continuing taper of her medications. We also encouraged her daughter, who works with pharmacists, to seek out education on use of intranasal naloxone.
References:


