Oxymetolazine (Afrin®) Use for Nosebleeds
June 2018

Patient Case

CA is an 82 year old woman with a primary diagnosis of bone cancer and a history of dementia who was admitted to hospice 4 months ago. She has no known drug allergies, however, she experiences severe dyspepsia with NSAIDs and many other medications. CA lives with her daughter and her daughter’s husband who are her primary caregivers.

Current medications:

- Aspirin 81mg; Chew and swallow 1 tablet by mouth daily for the heart
- Acetaminophen 325mg/5mL compounded susp; 10mL (650mg) by mouth 3 times a day for mild pain
- Donepezil (Aricept®) 10mg; 1 tablet by mouth at bedtime for dementia
- Hydrocodone-acetaminophen 7.5-325mg/5mL susp; 5mL by mouth every 6 hours as needed for moderate to severe pain

CA has developed a tumor inside the right side of her mouth near the jawline that is bleeding. The caregivers managed to stop the bleeding last evening by placing pressure on the site. They are concerned that the bleeding may worsen and they will not be able to stop it next time. Oxymetolazine (Afrin®) is frequently prescribed to manage nosebleeds. Would Afrin® be helpful in this case to control minor topical bleeding in the mouth?

Minor Topical Bleeding in Hospice

Minor topical bleeding is relatively common in the hospice population, whether the result of a bleeding malignant wound, or secondary to coagulation issues or disease progression. The best way to control a bleed is to prevent it by using non-adherent dressings or minimizing patient risk, including discontinuing medications that may cause bleeding. Some episodes of minor topical bleeding are refractory to dressings and applied pressure and require alternate therapies.

What is Oxymetazoline and why should I use it for minor topical bleeding?

- Oxymetazoline is a vasoconstrictor, and similar to epinephrine, may be used topically when applied to gauze or cotton swab to control bleeding.
- Easily accessible over-the-counter at most pharmacies and general stores
- Low cost compared to other recommended agents
- Other topical agents for this indication include:
  - Coagulants: Topical thrombin, silver nitrate sticks
  - Hemostatic agents (gauze soaked with IV solution): aminocaproic acid, epinephrine, transexamic acid
Sucralfate: Made into a paste using two x 1 gram tablets crushed in 5mL of water soluble gel

How do I administer Oxymetazoline for bleeding?

- **Nose Bleed (Epistaxis):**
  
  **Directions:** Squirt spray into medicine cup so it can easily be drawn up into an oral syringe. Draw up 1-1.5mL into a 3mL syringe and connect to a syringe driven atomizer (a.k.a. intranasal mucosal atomization device). Place a cotton ball in the medicine cup to soak up the remaining medication.

  - Ask patient to gently blow their nose to clear the nasal cavity
  - Position the patient approximately 45 degrees recumbent in the bed
  - Place the atomizer within the affected nostril and briskly compress to administer dose, asking the patient to inhale through their nose during the time you spray
  - Take the cotton ball you placed in the medicine cup and roll into a cigarette shape and place in the bleeding nostril
  - Tape a folded 4x4 gauze pad across the nose to hold the cotton ball in place and capture blood
  - Sit the patient back up and ask them to pinch their nostrils firmly (or you can clamp if you have a nasal clamp)
  - Wait 15 minutes
  - Repeat up to every 8 hours if needed for up to 72 hours

  Alternatively, the commercially available nasal spray apparatus may be used however may not cover as much surface area as a syringe driven atomizer.

  - Spray a cotton ball until soaked and set aside
  - Ask patient to gently blow their nose to clear the nasal cavity
  - Position the patient approximately 45 degrees recumbent in the bed
  - Place the nozzle within the affected nostril and briskly compress to administer dose, asking the patient to inhale through their nose during the time you spray
  - Take the cotton ball you placed aside and roll into a cigarette shape and place in the bleeding nostril
  - Tape a folded 4x4 gauze pad across the nose to hold the cotton ball in place and capture blood
  - Sit the patient back up and ask them to pinch their nostrils firmly (or you can clamp if you have a nasal clamp)
  - Wait 15 minutes
  - Repeat up to every 8 hours if needed for up to 72 hours

- **Bleeding Gums/Mouth or Minor Bleeding from Malignant Wound(s):**
  
  Although literature for Oxymetazoline for bleeding outside of epistaxis is sparse, there are case reports and expert opinions supporting the potential effectiveness of this vasoconstrictor on bleeding gums, oral mucosa and malignant wounds.8,9
Directions: Soak cotton swab tip (Q-tip®) or gauze with spray then apply topically to affected area(s), applying pressure for 5-10 minutes. Repeat up to 4 times a day if needed.

Pharmacist Assessment:

Although it may be a challenge keeping CA’s mouth open long enough to utilize topical medication, it is a better solution compared to oral systemic therapy since the bleeding is not continuous - oral therapy may upset her stomach and will need to be taken regularly for effectiveness. For minor topical bleeding, oxymetazoline has been shown to be as effective as other topical vasoconstrictors for managing bleeding with minimal risk. It is inexpensive and familiar to most patients and their caregivers.

Recommendations:

1. Discontinue aspirin therapy
2. Encourage the use of gauze and pressure on the bleeding area first – assess effectiveness before using medication
3. Start Oxymetazoline nasal spray; Soak cotton swab tip (Q-tip®) or gauze with spray then apply topically to affected area(s), applying pressure for 5-10 minutes. Repeat up to 4 times a day if needed.

For additional information on this topic, please review these references: