Potassium Permanganate: An Old Soak

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Contents

- The problem
- Actions
  - Potential contributing factors
- Questions & comments
At a hospital not far away....

1. Patient was prescribed potassium permanganate by the doctor for bilateral leg cellulitis
   ✓ Prescription was correct
   ✓ Drug chart was endorsed appropriately by the pharmacist
   ✓ Pharmacist discussed this with the nurse
   ✓ Labeled correctly
   ✓ Supplied to the ward in the original container

But....
At a hospital not far away….

“Ward staff nurse came to the nurse in charge saying that she gave the potassium permanganate tablet orally instead of diluting it in 4 litres of water and soaking the bilateral cellulitis legs of a patient. The patient spat them out, but the nurse did not escalate the error.”

The tablets got stuck in the patients throat. The patient was able to spit these out but not before a pharyngeal burn occurred
2. Patient was prescribed potassium permanganate by the dermatologist at the outpatient clinic for their hand
✓ Prescription was correct
✓ Dermatologist counseled the patient
✓ Dermatologist provided additional hand written instructions on the outpatient prescription
✓ Patient was counseled by pharmacy
✓ Potassium permanganate was correctly labeled & supplied

But....
At a hospital not far away....

“Patient attended the skin clinic for a wound infection on his hand. The doctor prescribed potassium permanganate. When the patient attended for dialysis he reported having swallowed 3 or 4 tablets. The patient felt alright”
Actions

- ? Remove from formulary
  - Clinicians said there were no alternatives
    - Drying properties, antimicrobial, clearing MRSA, alternative to oral antibiotics
    - Used for ulcers, severe pompholyx eczema & some suppurative conditions
  - Restricted to being prescribed or recommended by dermatology or vascular surgery
Actions

• Removed from stock lists
  – Except dermatology outpatients

• Ensure prescribers state the strength & volume of solution on the prescription

• Only supply whole packs
  – Reinforced current practice
Actions

• Dispensing label
  – Removed tablets from the label
    Potassium permanganate 400mg tablets
  – Clarity
    Not to be taken orally
    For external use only

• Use as a soak
Actions

• Always labelled with administration instructions
  – Dissolve one permitab in a large bowl of water and use as a soak

• Purple “For external use only” stickers added
Actions

- Supply a colour British Association of Dermatology leaflet
  - Aid understanding
  - Prevent burns from poorly dissolved crystals
How to use potassium permanganate solution soaks

- Potassium permanganate solution soaks help to dry up weeping or blistering skin conditions.

- You need a bowl or bucket, and a clean bin liner bag, either cold or tepid water, and the potassium permanganate tablets (Permitabs).

- Put the clean bin liner in the bowl, and fill with the required amount of water.

- Put the potassium permanganate tablet into the water. Handle the tablet with gloves to prevent them staining your skin.

- Agitate the water to dissolve the tablet. The water should be a rose wine colour.

- If you are soaking your hands or feet, you can apply vaseline to your nails to prevent them staining.

- Soak the affected area in the solution for 10 to 15 minutes.

- Then take off the solution, pat dry with a paper towel, and apply your prescribed cream or dressing.
Actions

• Stored with other external preparations in a separate cupboard/shelf

• Escalation
Future...

- ? Small bottles of potassium permanganate for further dilution
- Anything else???
Questions & Comments?