### PHAR:8251 Integrated Pharmacotherapy: Dermatology

## Part 1 - Assessment and Care of Burns in the Community

Ron Herman, Ph.D.

#### Case Study #1

30 Y.O. WM comes into the pharmacy and wants a salve to treat his hands. While cleaning auto parts with gasoline his cigarette ignited his cleaning rag and both hands were burned. The hands are red, swollen and there are numerous vesiculations. How would you recommend the wounds be treated?

- Have the patient carefully wash their hands (do not scrub them).
- Then wrap the hands in Saran wrap (to provide an occlusive dressing).
- Then refer either directly (or through their local physician) to a burn treatment center (because the burn involves the hands).

#### Case Study #2

A farmer was using a cutting torch to cut up some old farm machinery to sell the scrap metal. After cutting through a large section he slipped and the torch went across his left thigh. The area affected is a little more than both hands together. He limps into your pharmacy and wants to know what he can use to treat this burn. He says that it doesn't hurt much, but that it looks nasty. Upon inspection you see that there is some blanching around the edges, but most of the area is yellow, does not blanch and is not painful to touch. How would you recommend this wound be treated?

- Have the patient recover the wound if it is clean. Use an antimicrobial agent if you need to redress the wound.
- Then refer to a local hospital for care because it is a third degree burn (< 10% BSAB) that will likely require debridement and skin grafting because of the depth of the injury.

#### Case Study #3

A patient comes into the pharmacy and shows you her forearms and they are bright red and very painful. She thinks she has had an allergic reaction to a cleaning solution. You question her further and she explains that her elderly father just passed away and they spent the day yesterday cleaning his filthy trailer and she used a strong commercial cleaning solution that was at her place of employment. You examine the container and notice that it contains ammonium hydroxide. You also notice that the forearms above the top of where rubber gloves reached were red, slightly swollen, painful, there are numerous small blisters that have formed and the areas blanch when a finger is pressed into the wound. How would you assess this wound and what would you recommend?

• This is a second degree chemical burn, <10% BSAB and doesn't cover any major joints, therefore it could be treated locally.

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- Recommend rinsing the wounds with large amounts of water to remove the base that caused the burn if the injury was recent.
- Keep the skin well moisturized. If there are breaks in the skin, then cover them with OTC triple antibiotic ointment. Also instruct her to watch for signs of infection (advancing redness, fever) and if he sees this or blister formation, to go to her local MD.

#### Case Study #4

A patient comes into the pharmacy with her 9 year old son. He was playing with bottle rockets and held one too long. He has an area on his right forearm that is smaller than his hand that is bright red, but blanches when your press your finger into the wound and there are no blisters. How would you recommend this wound be treated?

- This is a first degree burn that is about 1%, so the mother should be able to care for the wound.
- Recommend cleaning the wound with an antiseptic soap. If there are breaks in the skin apply a triple antibiotic ointment and then cover either with gauze or a non-adherent telfa pad. Also instruct her to watch for signs of infection (advancing redness, fever) and if she sees this or blister formation, to go to her local MD.
- If the child has discomfort recommend acetaminophen tablets or syrup at a dose of 10-15 mg/Kg every four hours if needed.
- As the wound begins to heal in several days encourage the use of skin moisturizers to keep newly healing skin from drying and cracking.