PBL Case #1: Deadly Flames

Your Role:
You are the trauma team at UIC's medical center within the Burn Unit. You're hanging out in the resident's lounge playing 'Words with Friends' on your iPads when your pagers all go off with a message to report to the emergency receiving area immediately.

Background:
Tanya, an 8-year-old Hispanic female, is in transport by an ambulance to UIC's emergency room after being rescued from her burning house in Pilsen. She was asleep at night when a spark from a cigarette started a fire, leaving her trapped in her bedroom. By the time the fire rescue squad arrived, she had suffered severe burns.

Objectives:
<u>Pre-Case</u>

I. Identify the basic structure (3 major layers) and components of the skin.
II. Describe how several important functions of the skin are accomplished.

<u>Case:</u>

III. Differentiate 1st, 2nd, and 3rd degree burns by damage to skin layers and appearance.
IV. Use the "rule of nines" to determine the extent of a critical burn
V. Describe the physiological problems occurring with critical burns and explain the appropriate treatment options.

Assessment:

-SOAP notes
-2 min. presentation of treatment plan to Tanya's parents (live or recorded)
-Quiz on objectives above (at end of week)

Possible Resources:

--PBL Toolbox "Finding Info" section at uiccphealthscience.weebly.com
--eTextbook pgs 124-125

Paramedic Calls Transcript:

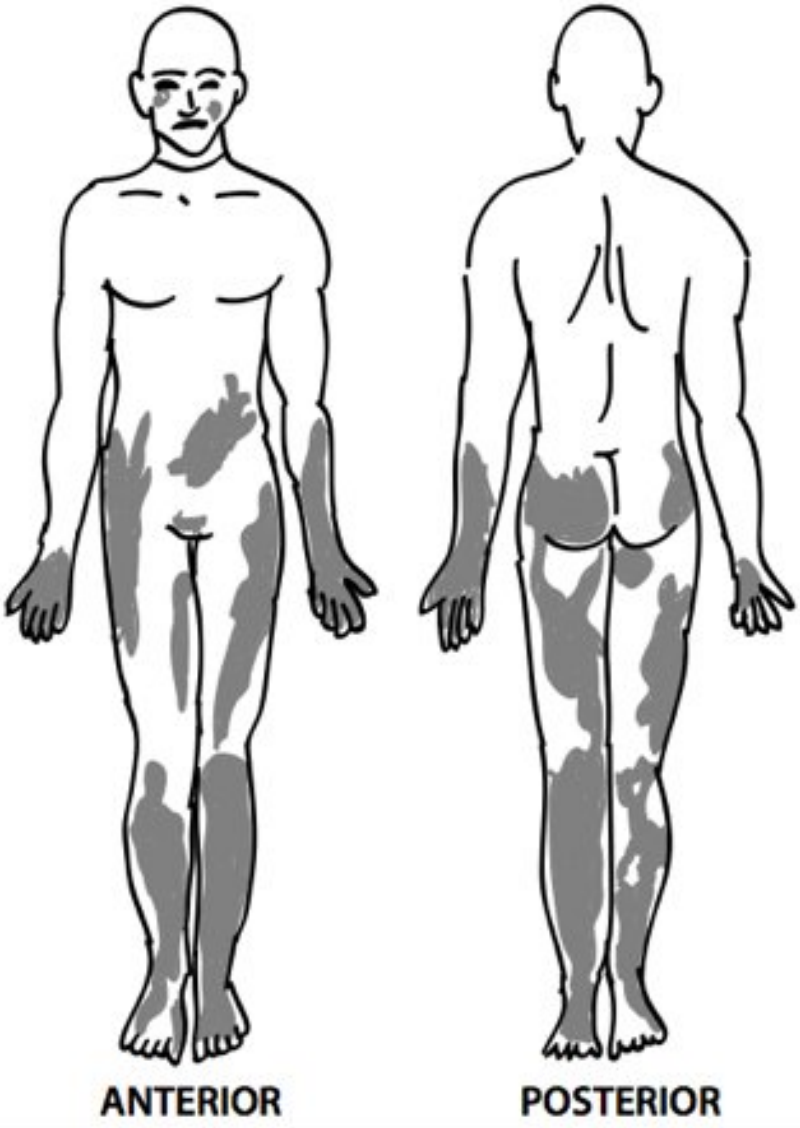
Clip 1:

Paramedic: This is Unit 701. We have an 8 year old female who has suffered from severe burns to her lower extremities, hands, and abdomen and minor flash burns to the face following a house fire. Burns appear gray-white with red, blistered borders. Patient just regained consciousness, but disoriented and verbally unresponsive. Vitals are unstable with blood pressure = 60 / 40; heart rate = 165 [beats / min].; and respiratory rate = 35 [breaths / min]. Medications and allergies are unknown. Medical history also unknown. Parents are in transit to the hospital, but no family members were present upon our arrival. Estimated arrival at UIC Burn Unit in 10 minutes.

Clip 2:

Paramedic	***Tanya***
"How are you feeling now?"	"It hurts."
"Can you tell me your name?"	"Tanya."
"Tanya, do you know where you are?"	"On an ambulance?"
"Do you know what day it is?"	"I don't remember"
"Tanya, do you remember what happened?"	"There was a big fire and I couldn't get out"
Patient is alert & oriented (Person, Place, Time & Event) so paramedic moves on to SAMPLE history.	
"Tanya, my name is Mike and I'm going to help you while we go to the hospitals so the doctors can take care of you. That means I'm going to have to ask you some more questions and continue to check that you're doing ok by taking your blood pressure and pulse rate every few minutes. Is that ok?"	"Yea."
"Tanya, do you know if you are allergic to anything, like any medicines?"	"I don't know"
"Ok. Do you take any medicines?"	"No, only when I had an ear infection, but that was a long time ago."
"Do you remember the last time you ate something?"	"I had macaroni and cheese for dinner."
"Do you remember what happened before you were in the ambulance?"	"I was sleeping and I woke up very hot and sweaty and it was all smoky. I tried to run out of my room to find my brother and the fire was really hot and I got burned, so I went back to my room and hid in the closet. But then I don't remember."
The paramedic has obtained the SAMPLE history and now moves on to an evaluation of the pain from Tanya's burns using the FARCOLDER method of interviewing.	
"Tanya, I'd like you to tell me how you're feeling now. First, can you tell me where it hurts?"	"It hurts the most on my hands, but my tummy hurts too and different parts of my legs."
"Can you describe what the burn on your right hand feels like?"	"I can't feel it in the middle, but it stings around the outside, by my wrist."
"Tanya, does anything else bother you right now besides the pain from where the fire touched you?"	"It's just a little hard to breath."
"Thanks Tanya. You're a really brave girl and we're going to make sure you get all better, ok? Just hang in there we're almost there."	"Ok."
Note: The paramedic skipped some of the categories that did not apply to the burn situation, including Frequency, Radiation, Onset, Duration, Exacerbating and Relieving factors)	

As you examine Tanya, her burns follow the pattern in the below diagram. The gray areas represent the burns. Complete a qualitative and quantitative description of the burn injury in the space below. You can use rough estimates in the Rule of Nines!



SOAP Notes

Subjective: This describes the patient's current condition in narrative form. The history or state of experienced symptoms are recorded, concisely, in the patient's own words. If the patient is unconscious or cannot speak for himself/herself, often family members, caregivers, witnesses at the scene, or others can provide information.

Signs & **S**ymptoms*	
Allergies	
Medications	
Past medical history **Social:** *alochol, smoke, drug use, marital status, children, occupation, sexual history, living situation, etc.* **Family:** *conditions & diseases run in the family*	
Last oral intake	
Events leading to injury or illness	
***F**requency	
***A**ssociated Symptoms	
***R**adiation	
***C**haracter	
***O**nset	
***L**ocation	
***D**uration	
***E**xacerbating Factors	
***R**elieving Factors	

Objective: Empirical (data-driven) record of patient's condition (quantitative information)

Measurements (ex: age, weight)	
Vital Signs (BP, HR, RR, Temp)	
Physical Exam Results	
Lab Results	

Assessment: Quick summary of the patient with main symptoms/diagnosis including a differential diagnosis, a list of other possible diagnoses usually in order of most likely to least likely.

Summary Diagnosis Differential Diagnosis List	

Plan: This is what the health care provider will do to treat the patient's concerns - such as ordering labs, radiological work up, referrals given, procedures performed, medications given. This should address each item of the differential diagnosis. A note of what was discussed or advised with the patient as well as timings for further review or follow-up may also be included.

Plan steps	

Learning Questions	Owner	New Information
		Source:
		Source:
		Source:
		Source:
		Source: