



Simulated Clinical Experience (SCE™) Overview

Location: Emergency Department

History/Information:

A 32-year-old man presents to the Emergency Department complaining of being burned. He called the emergency medical service (EMS) from a pay phone on a street corner. He denies any medical history, states he is taking no prescription medications, and denies drug or alcohol use. Investigators have examined the address on the patient's driver's license and report finding a crystal methamphetamine laboratory complete with acetone, propane, white phosphorus, solvents, and other chemicals. There is evidence that the patient was burned during a flash fire that has since been extinguished. The patient reports that he is having difficulty hearing. He has burns over his anterior chest, anterior abdomen, and full circumference of arms and hands.

Healthcare Provider's Orders:

ABG STAT
Carboxyhemoglobin level STAT
CBC, Electrolytes, Amylase, Lipase, PT, PTT, Type and Cross match STAT
Drug screen STAT
100% humidified oxygen STAT
0.9% NS 4mL/kg/% Total Body Surface Area (TBSA). Administer 1/2 over 1st 8 hours from time of injury, remaining 1/2 over 16 hours
Insert Urinary catheter with hourly I and O recordings.
Chest x-ray STAT
Consult for a fiberoptic bronchoscopy STAT
Pulmonary function tests STAT

Learning Objectives

1. Performs a rapid, accurate physical assessment, cardiac rhythm interpretation, and initial interventions for the patient experiencing a burn injury (APPLICATION).
2. Identifies the extent of the thermal burn by utilizing the Rule of 9 (KNOWLEDGE).
3. Develops a plan to protect the airway in a patient with a burn injury (COMPREHENSION).
4. Develops a plan for fluid calculation and replacement in a patient with a burn injury (ANALYSIS).
5. Formulates, prioritizes and individualizes a plan of a care for the patient with a thermal burn injury (SYNTHESIS).

Questions to Prepare for the Simulated Clinical Experience

1. How is the extent of injury determined according to the Rule of 9?
2. What is the most life-threatening concern for a patient who has an explosive, chemical burn to the upper chest?
3. Discuss the need for fluid resuscitation, how the amount of replacement is determined, and potential complications for the patient with acute thermal injury.
4. What unique observations must be made by the nurse regarding patient exposure to explosive forces?
5. What legal responsibilities does the nurse have when caring for a patient who is involved in a criminal investigation? Include the recovery of evidence in the answer.
6. How is pain managed in the acute burn patient?
7. Which location/unit is the preferred setting for the care of the patient with thermal injury and why?
8. What topical medications are used to prevent infection and what are the nursing implications?
9. What are safety concerns for healthcare providers when exposed to chemical burns from an explosion?

References

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