Near Drowning

Location: Emergency Department

History/Information:
A six-year-old female has just been brought into the Emergency Department in full cardiac arrest with CPR being performed by paramedics. They report that she fell through the ice while ice skating and it took bystanders four and a half minutes to get her out of the water. The bystanders immediately began CPR, which has been ongoing now for 30 minutes. The child is being ventilated with a bag-valve-mask device via endotracheal tube. Her parents are present and report that she is a healthy child, takes no medications, has no allergies, and has received her immunizations.

Healthcare Provider's Orders:
Continuous cardiac monitor
Continue SpO2 monitor
Continue bag-valve-mask ventilations with 100% oxygen
Start IV of 0.9% NS at keep vein open (KVO) rate
Begin rewarming child
Continuous core temperature monitoring
Urinary catheter
Stat Portable Chest x-ray
Stat Electrolytes, BUN, Creatinine, Glucose, ABG
Stat Urinalysis

1. Formulates a nursing plan of care for a patient who has experienced near drowning (ANALYSIS).
2. Prioritizes the implementation and approach to the nursing management of a patient who has experienced near drowning (ANALYSIS).
3. Uses critical thinking and the nursing process as a framework for clinical decision-making (ANALYSIS).
4. Evaluates the patient's response to interventions and modifies the nursing care as appropriate for the patient who has experienced near drowning (EVALUATION).
5. Demonstrates communication techniques used with a child's family that help to alleviate anxiety and fear (APPLICATION).
1. Discuss the pathophysiological responses that occur when water enters the airway during a fresh water submersion. How does this differ if the fluid is salt water?

2. Discuss risk factors that predispose children to drowning accidents.

3. Discuss the differences in the management of cold water near drowning and warm water near drowning in pediatric patients.

4. Describe the mammalian diving reflex and its affect on the physiology of a pediatric victim of cold water submersion.

5. Describe rewarming techniques for hypothermic patients, including warmed oxygen and IV fluids, peritoneal lavage, external warming devices, extracorporeal membrane oxygenation, and dialysis. What complications can arise during the rewarming process?

6. Explain when defibrillation is appropriate for the pediatric patient and the steps involved. Is it appropriate to use an automated external defibrillator on a child under the age of eight? Use current literature to support your answer. What risks are associated based on your response?

7. Identify and discuss complications that occur in the immediate recovery period of 72 hours post near drowning.

8. Develop a teaching plan for the parents aimed at prevention strategies to avoid drowning.

References:


