

HEMS SYSTEM

CRITICAL CARE PATIENT TRANSPORT CURRICULUM

Initial Date: 09/2004

Revised Date: 1/3/2024

Section: 8-15(S2)

CRITICAL CARE PATIENT INTER-FACILITY TRANSPORT CURRICULUM

COURSE OUTLINE

1. Ventilator patient concerns (4 hours total)
 - A. Types of ventilators
 - B. IPPB, SIMV, PEEP, CPAP
 - C. Use of transport ventilators
 - D. Complications
 - E. Use of Pulse Oximeter/Capnography
2. Chest Tubes and Pleurovac (1 hour)
 - A. Principles of pleural cavity evacuation
 - B. Maintaining chest tubes
 - C. Review various systems
 - D. Pleurovac Practical Lab
3. Maintenance of invasive lines (2 hours)
 - A. Types of hemodynamic monitoring
 - a. Various equipment
 - b. Insertion sites
 - c. Maintaining infusions
 - d. Complications
4. Equipment Training Videos (1 hour)
 - A. IV Pumps
 - B. Ventilator
 - C. 12 Lead Monitoring
5. Thrombolytics (1 hour)
 - A. Indications, contraindications, adverse effects, and administration
 - a. Streptokinase
 - b. tPA
 - c. Retavase
 - d. TNKase
 - e. Heparin
 - f. Lovenox
6. Interpreting blood gases (1 hour)
 - A. The use of ABGs in ventilator managements
7. Blood products (1 hour)
 - A. Whole blood/Packed RBCs/Plasma
8. Cardiac Enzymes (1 hour)
 - A. Cardiac physiology and the meaning of enzyme abnormalities
9. Vasoactive drugs (2 hours)
 - A. Indications, contraindications, adverse effects, and administration
 - a. Dopamine
 - b. Epinephrine
 - c. Dobutamine
 - d. Levophed
 - e. Amrinone/Milrinone
 - f. Nitroglycerin
 - g. Nitroprusside
 - h. Esmolol
 - i. Labetalol

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10. Critical Care Patient Transport Protocol Review (1 hour)
 - A. Protocol review and miscellaneous drugs
 - a. Indications, contraindications, adverse effects, and administration
 1. Aminophylline
 2. Mannitol
 3. Phenytoin
 4. Insulin
 5. Propofol
 6. Oxytocin and related drugs
11. Paralytics (1 hour)
 - A. Indications, contraindications, adverse effects, and administration
 - a. Non-depolarizing neuromuscular blockers
 - b. Sedatives during paralytic maintenance
 - c. RSI indications during critical care patient transport
 - B. Administer with Medical Control
12. Practical Lab (1 hour)
 - A. IV Pumps
 - a. Various tubing
 - b. Maintaining a drip while changing to the pump
 - B. Ventilator
 - C. 12 Lead
 - D. CO2 detector
13. Cardiac Physiology/12-Lead ECG (4 hours)
 - A. Cardiac physiology and cardiac drug review
 - a. Indications, contraindications, adverse effects, and administration
 1. Lidocaine/Procainamide
 2. Potassium
 3. Morphine
 4. Cardizem
 5. Amiodarone
14. 12-Lead AMI Recognition (2 hours)
15. High Risk Pregnancy (1 hour)
 - A. Indications, contraindications, adverse effects, and administration
 - a. Magnesium Sulfate
 - b. Pitocin
16. Antibiotics (1 hour)
17. Pediatrics (4 hours)
 - A. Pediatric Airway and Ventilation management including Ventilator Dynamics and Chest Tube Monitoring and pneumothorax recognition and treatment (1 hour)
 - B. Pediatric fluid requirements including maintenance and bolus therapies (1 hour)
 - C. Pain management (1 hour)
 - D. Case studies, trauma specific (1 hour)
18. Critical Care Patient Transport Charting (1 hour)
19. Critical Care Patient Transport Call: Start to Finish (1 hour)
 - A. General considerations
 - B. Staffing and quality management considerations
 - C. When to refuse a call
20. Critical Care Patient Transport Case Presentations (1 hour)
21. Daily Quizzes
 - A. Ventilators, chest tubes, invasive lines
 - B. Thrombolytics, ABGs, blood, enzymes, pressers, paralytics
22. Written and Practical Exam (4 hours)