

Resident objectives in PICU rotation

Sheikh educational hospital

E/1.Mechanical Ventilation

E/a. Pressure and volume modes of mech. Ven.

E/b. PEEP, IMV/SIMV, CPAP, HFV, Inverse ratio ven., PSV, APRV, VC PCV,

O/c. Negative pressure Ven.

O/c. noninvasive vent.

E/d. One lung vent.

E/e. Indications and hazards of mech. Vent.

E/f. barotrauma and volutrauma

E/g. Criteria for extubation and weaning technique

E/h. permissive hypercapnea

A/i. Liquid ventilation

E/2. Air way management

E/a. Emergency a.w. manag.

E/b. Endotracheal intubation

O/c. Difficult a.w intubation

E/d. a.w emergencies

O/c. Long term vent. vs. tracheostomy

E/3. Pleural disease

a. Empyema

b. pleural effusion

c. pneumo&hemothorax

d. Chylothorax

O/4. Positional therapy(pron&rotations)

PR/5. Fluid balance

a. Electrolyte balance

- b. interpretation of urine electrolyte
- 6. Acid base disorder and management

E/7. Pediatrics life support

- E/a. Infant BLS
- E/b. Child BLS
- E/c. PALS
- E/d. PostCPR management
- E/E. Shock therapy and cardioversion
- E/f. EKG of critically ill child

E/8. ARDS

- a. DiagnosisManagement
- b. Pul. Surfactant therapyin infant&children

PR/9. Shock

- a.Vasoactive&inotrpe therapy
- b.SIRS, sepsis , septic shock
- a. Diagnosis of kinds of shocks and therapy
- b. Multi organ failure

O/10. Pul. Hypertension

E/11. Oxygen therapy

- E/a. O2 utilization
- A/b. Hyperbaric oxygenation

E/12. Respiratory failure

- a. Respiratory physiology& pathophysiology
- b. Hypoxic res. Failure
- c. Hypercarbic res. Failure

E/13. Refractory seizure

- a. Statues epilepticus

E/14. Pain& Sedation

O/15. Intracranial bleeding

- a. subdural bleeding(traumatic &no traumatic)
- b. Intracerebral
- c. Epidural
- d. Subarachnoid
- c. intraventricular

E/16. Nutritional support

- a. Enteral
- b. Parenteral(TPN, Partial P.N)

O/17. End of life

- a. Brain death
- b. Vegetarian state
- c, Ethics in PICU
- c. Poor prognosis disease .withhold or withdraw of treatment/Non CPR

E/18. Perioperative (management)

- a. preoperative
- b. Post-operativecomplications

E/19. Stress ulcer

E/O/20. Hospital acquired infection

- a. VAP(Ventilator associated pneumonia)
- b.ICU support of the immunosuppressed patient
- c. Acquired immunodeficiency syndrome
 - 1. Critical ill child
 - 2. Transplant
 - 3. Oncologic
- d. Infectious risks to healthcare workers
- e.. ICU infections
- E/f. Anti biotic therapy in PICU
- E/g. Isolation and reverse isolation

A/21. Plasmaphoresis /hemo dialysis

A/22.Acute syndromes associated with neoplasm and anti neoplasm therapy

- a. Tumorlysis syndrome

E/23. Pul. Edema (Cardiogenic,noncardiogenic)

24. Cardiac tamponad(and other pericardial disease)

O/25. Acute complications of cardiomyopathy and myocarditis

E/26. Hemodynamic effects of ventilator assist device

O/27. Hypertension crisis

E/28. Status asthmaticus

- a. Mechanical ventilation

O/29. Smoke inhalation

- a. Aspiration

E/O/30. Near drowning

PR/E/31. Bronchopul. Infection and bronchiolitis

E/O/32. Rhabdomyolysis

E/33. Cerebral support in ICU

- a. management of ICP risied
- b. Intracranial monitoring(Invasive,noninvasive)

E/O/34. Neuromuscular disease causing respiratory failure

- a. GuillainBarre
- b. Myopathies, SMA,
- c. Toxic (Drugs, butolism)
- d. Neuropathy of critical ill child

PR/35. critical ill child endocrinology

- a. Thyroid function
- b. DKA
- c. Glucose management and Hypoglycemia
- d. Disorders of ADH
- c. Disorders of Ca, Mg, P,

d. metabolic error syndromes with critical condition

PR/36. Principles of blood component therapy

PQ/37. Upper GI bleeding

O/38. Temperature related injures

- a. Hypothermia, frostbite
- b. Hyperthermia, heat shock

A/39. Organ transplantation

- a. pre/postoperative care

O/A/40.Trauma

- a. brain& spinal
- b. Chest
- c. Abdomen

O/41. Acute hemolytic disorders

- a. DIC
- b. HUS
- c. thrombolytic and anticoagulant therapy

O/42.Electrical injury

E/O/43. Coma score system

O/44. Transport medicine

A/45. Extravasation

-----Prerequisite Skills-----

E/ I.V access

A/a. CVP

E/b. I.O

E/c. Arterial

E/Thoracocentesis

E/Paracentesis

E/LP

E/O/BMA

E/Umbilical catheterization

A/Pericardiocentesis

E/Tracheal intubation

E/Management of pneumothorax

E/Bag mask ventilation

E/Maintenance of an open a.w. in the nonintubated pt.

E: Essential

O: Optional

A: Advantage

PR: Prerequisite

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