Exam 1 Concept Review

1. Endotracheal Tube care
    a. Assess position and placement of tube
    b. Document size of tube and placement of tube in centimeters where it meets the clients lips or teeth→ cm are marked on the tube
    c. 2 staff members should reposition and re-secure tube Q2H or PRN
    d. Perform PRM
    e. Use soft wrist restraints to prevent self-extubation only if necessary
    f. Suction secretions to maintain patency of the tube
    g. Support tubing to prevent erosion or displacement
    h. Resuscitation bag with facemask should be at bedside at all times in case of an emergency!
2. Incorrect position of ET tube
    a. Can go down into the right bronchus due to the angle
    b. Common signs are:
        i. Absent breath sounds on the left side
        ii. Absent of chest wall expansion on the left side
        iii. Low SpO2
3. Chest tube Care
    a. Check water seal level every 2 hrs
    b. Monitor and record drainage→ >70 mL/hr is excessive
    c. Monitor tubing for kinks, occlusions, or loose connections
    d. Monitor insertion site
    e. Pt in semi to high Fowler's
    f. CXR to verify placement
    g. DO NOT clamp→ can cause pneumothorax
4. Pneumothorax
    a. Occurs when air or gas is in the pleural space, causing a lung to collapse
    b. There are two types→ tension and spontaneous
    c. Tension pneumothorax: air enters the pleural space during inspiration and cannot exit during expiration
    d. Spontaneous pneumothorax: small bleb on the lung ruptures and air is able to enter the pleural space (this is when there is no trauma)

5. Chest tubes (expected findings in the chambers)
    a. First Chamber: Drainage collection
    b. Second Chamber: Water seal
        i. Movement of the fluid level should be seen during respirations
        ii. Continuous bubbling→ air leak
    c. Third Chamber: Suction control
6. Blood Administration (important VS)
    a. TEMPERATURE
    b. Blood pressure
    c. Heart rate
    d. respirations
7. Blood Administration (administration times)
    a. Start administration within 30 mins of receiving from the blood bank
    b. Finish infusion in four hours after receiving the blood
8. Blood Administration (monitoring times)
    a. Patient should be monitored continuously for first 15 mins to assess for reactions
    b. After that vitals should be performed every 15 minutes
9. Blood Administration (reactions)
    a. Acute hemolytic
        i. Typically occurs in first 15 minutes
        ii. ABO or Rh blood incompatibility
        iii. S&S→ Fever, chills, low back pain, nausea, chest tightness, dyspnea, anxiety
    b. Febrile non-hemolytic
        i. Occurs with frequent transfusions
        ii. Most common reaction
        iii. Sensitivity to donor leukocytes or other components
        iv. S&S→ chills, fever, flushing, anxiety, muscle pain, headache
        v. Can be prevented by filter
        vi. Checking temp is very important to catch this rxn
    c. Allergic
        i. Sensitivity to something in the blood→ probably preservative
        ii. Benadryl is usually given before infusion to prevent this
        iii. S&S→ local erythema, hives, itching

d. Bacterial contamination
    i. Contaminated blood
    ii. Sepsis rxn
    iii. S&S→ tachycardia, hypotension, fever, chills, V/D, shock
e. Circulatory overload (TACO)
    i. Infusion is too fast
    ii. Common w/ CHF, renal dysfunction, older age, acute MI
    iii. S&S→ cough, dyspnea, distended jugular vein, pulmonary congestion, HTN, tachycardia, bounding pulse, restless
    iv. Treatment→ elevate HOB, monitor resp. distress, administer O2, administer diuretics

10. Blood Administration (fluids to infuse with)
    a. ONLY normal saline→ and remember to prime the tubing first!!
11. Blood Administration (consent, verification, nursing care)
    a. Consent must be obtained before transfusion
    b. Blood must be verified by TWO nurses before transfusion
    c. Type and Cross must be completed
    d. Remember an 18 or 20 g needle must be used
12. Pulmonary embolism nursing care and medications
    a. Nursing Care
        i. Administer O2
        ii. Assess respiratory status at least every 30 min
        iii. Monitor cardiac status
        iv. Provide emotional support and help prevent anxiety
        v. Monitor changes in LOC and mental status
    b. Medications
        i. Anticoagulants→ heparin, enoxaparin, warfarin, fondaparinux
        ii. Direct factor Xa inhibitor→ Rivaroxaban (Xarelto)
        iii. Thrombolytic therapy→ alteplase, reteplase, tenecteplase
        iv. Be sure to monitor for bleeding when this meds are being used!!!
13. Acute respiratory failure manifestations
    a. PaO_2 <60 mmHg
    b. $PaCO_2$ >50 mmHg
    c. pH <7.35

14. Priority care for complications (ABCs)
    a. Always assess Airway, Breathing, and Circulation FIRST
    b. CPR, defibrillation, and advanced cardiovascular life support may be needed
15. Identify dysrhythmias
    a. Premature atrial contraction→ QRS is before the P wave, usually seen every once in awhile
    b. Atrial tachycardia→ HR >150
    c. Atrial flutter→ Saw tooth
    d. Atrial Fibrillation→ No P wave, Can't measure PR interval
    e. First degree heart block→ Long PR interval
    f. Second degree type one, Winckebach→ longer longer longer drop, now you have a Winckebach, P wave is not always followed by QRS complex
    g. Second degree type two→ Always has P wave but sometimes no QRS
    h. Third degree heart block→ Nothing is correlating
    i. Ventricular Tachycardia
    j. Torsades de Pointes
    k. Ventricular Fibrillation
    l. Asystole
16. Defibrillation & Cardioversion
    a. Defibrillation
        i. Used for V fib and V tach w/out a pulse
        ii. Not used in conscious people or with a pulse
        iii. Delivery is immediate and unsynchronized
    b. Cardioversion
        i. Used for atrial dysrhythmias, supraventricular tachycardia, v tach w/ pulse
        ii. Timed electrical current
        iii. Synchronized with ECG on a cardiac monitor
17. Reducing CAD
    a. Physical activity
    b. Healthier foods
    c. Reduce salt and cholesterol in diet
    d. Relieve stress

    e. Improve mental health
    f. Reduce weight
    g. Quit smoking
18. Ventilator care/checklist
    a. HOB >30 degrees
    b. Monitor temperature
    c. DVT prophylaxis
    d. Ulcer prophylaxis
    e. Monitor WBC count
    f. Max and min FiO2
    g. Max and min Peep
19. Myocardial infarction labs
    a. Troponin
    b. Creatine kinase
    c. myoglobin
20. Myocardial infarction manifestations
    a. Sudden chest pain
    b. SOB
    c. Nausea
    d. Anxiety
    e. Cool, pale skin
    f. Increased HR
    g. Increased RR
    h. ECG changes in STEMI
    i. Cardiac enzymes
21. Alteplase nursing tasks
    a. Administer within 30 minutes of arrival
    b. Reconstituted in sterile water
    c. Avoid IM injections
    d. Start two IVs before beginning
    e. Avoid continuous BP cuff monitoring
    f. Monitor for reperfusion
    g. Check for signs of bleeding
22. Sedative and paralytic medications
    a. Pentobarbital, secobarbital

b. Used for general anesthesia
c. Monitor respiratory rate!!

23. Atelectasis manifestations
    a. Increasing dyspnea
    b. Lower lobes have diminished breath sounds
    c. Respiratory distress
    d. Tachycardia
    e. Tachypnea
    f. Pleural pain
    g. Central cyanosis
    h. Orthopnea
    i. anxiety
24. Flail chest manifestations
    a. Unequal chest expansion (affected side may not expand)
    b. Paradoxical chest wall movement
    c. Tachycardia
    d. Hypotension
    e. Dyspnea
    f. Cyanosis
    g. Anxiety
    h. Chest pain
25. Chest tube indications
    a. Drain fluid, blood, or air
    b. Reestablish negative pressure
    c. Facilitate lung expansion
    d. Restore normal intrapleural pressure
26. Intubation respiratory monitoring
    a. Assess every 1-2 hr for breath sounds equal bilaterally, presence of reduced or absent breath sounds, respiratory effort, or spontaneous breaths
27. Valvular heart disease nursing care
    a. Monitor weight
    b. Assess heart rhythm→ may be irregular, bradycardia, or have murmur
    c. Administer O2 and meds as prescribed

d. Maintain fluid and sodium restrictions
e. Help client conserve energy

28. Pacemaker education
    a. Temporary→ continuous ECG monitoring will occur
    b. Permanent
        i. Carry ID card at all times
        ii. Check pulse daily, same time every day
        iii. Report dizziness, fainting, fatigue, weakness, chest pain, hiccupping, palpitations, difficulty breathing, or weight gain
        iv. Follow activity restrictions
        v. Avoid direct blows to chest
        vi. Do not place items that generate a magnetic field over the pacemaker
        vii. Tell other providers or dentists about the pacemaker
        viii. Inform airport security about pacemaker
29. Modifiable and nonmodifiable risk factors for CAD
    a. Increased age
    b. Gender
    c. Genetic predisposition
    d. High lipids
    e. High BP
    f. Diabetes
    g. Tobacco
    h. Physical inactivity
    i. Obesity
30. Pericarditis treatment
    a. NSAIDS→ Pain during acute phase and helps pt reabsorb fluid
    b. Colchicine→ used w/ severe pericarditis if pt does not respond to NSAIDS
    c. Corticosteroids→ Not responding to NSAIDS or NSAIDS are contraindicated (like in pregnancy)
31. Hypertensive crisis treatment
    a. Hypertensive Emergency→ IV vasodilators, labetalol and nicardipine, prepare to administer NS if BP drops too low

    b. Hypertensive Urgency→ beta-adrenergic blockers (labetalol), ACE inhibitors (prils), alpha2 agonists (clonidine)

32. AAA manifestations
    a. Constant gnawing in abdomen
    b. Flank or back pain→ caused by pressure on nerves
    c. Pulsating abdominal mass
    d. Bruit
    e. Elevated BP
33. Bronchoscopy (diagnostic/nursing care)
    a. Make sure dentures are removed
    b. NPO for 4-8 hrs
    c. Assess gag reflex
    d. Monitor VS, respiratory pattern, and oxygenation
    e. AFTER→ monitor VS and LOC, assess gag reflex, cannot discharge until client can adequately cough and respiratory status is normal
    f. Expect client to have sore throat, cough small amounts of blood-tinged sputum, and hoarse voice
34. Cardiac Catheterization nursing care
    a. Assess VS every 15 minutes for first 4 hrs
    b. Assess for bleeding
    c. Maintain bed rest, supine
    d. Continuous cardiac monitoring
    e. Give antiplatelets and thrombolytics as prescribed
    f. Monitor urine output
    g. Administer IV fluids