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ACTIVE LEARNING TEMPLATE: *Basic Concept*

STUDENT NAME *emily, michelle, amy, sara*

CONCEPT *Acid Base Balance*

REVIEW MODULE CHAPTER _____

Related Content

(E.G., DELEGATION, LEVELS OF PREVENTION, ADVANCE DIRECTIVES)

Normal

pH 7.35-7.45
PaCO₂ 35-45
PaO₂ 50-70
HCO₃⁻ 22-26
O₂ sat 92-94%

ROS Underlying Principles

LOW pH = acidosis
LOW O₂ sat = ↓ CO₂ & O₂ exchange
High PaCO₂ = holding onto
LOW PaO₂ = Not exchanging
LOW HCO₃⁻ = Kidneys Not fully developed

S/Sx

- Tachypnea*
- Dyspnea*
- Intercostal or substernal retractions*
- ↑ periods apnea*

Nursing Interventions

WHO? WHEN? WHY? HOW?

BPD

LOW PaO₂
High PaCO₂

S/Sx

- Dyspnea*
- Barrel chest*
- Wheezing*

STUDENT NAME _____

CONCEPT

Nutrition

REVIEW MODULE CHAPTER _____

Related Content

(E.G., DELEGATION, LEVELS OF PREVENTION, ADVANCE DIRECTIVES)

- NG
- OG
- TPN
- Gavage
- Caloric needs
- Accurate I/O's
1g = 1mL
- Immature GI system
- DO NOT PROP bottle
- Slow feeders
↳ give slow
- feeding nipple

Underlying Principles

- Amount / method determined by size + condition
- 120 - 150 kcal/kg/day for preterm
- Breast milk = best!!
- Risk for: anemia, rickets, hypoglycemia
- INVOLVE PARENTS!!
- may still need gavage feedings even if baby is sucking/ swallowing and breathing

Nursing Interventions

WHO? WHEN? WHY? HOW?

- NG tube feedings => Still give hard nipple to suck on
- Observe for S/S of residual
 - distention
 - vomiting
 - blood in gastric output
- Slow / small feeding
- Conserve energy!!
- Frequent burping
- Be Patient
- Non nutritive sucking
- Check residual before each feed
- Promote oral sensitivity before each feed
- ↓ Stimuli
- Subtract residual from next feed

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ACTIVE LEARNING TEMPLATE: System Disorder

STUDENT NAME _____
DISORDER/DISEASE PROCESS Cold Stress REVIEW MODULE CHAPTER _____

Alterations in Health (Diagnosis)

- Hypoxia
- Hypoglycemia

Pathophysiology Related to Client Problem

- Activates Brown Fat Metabolism

Health Promotion and Disease Prevention

- Prevent hypothermia
- Maintain NTE

ASSESSMENT

Risk Factors

- Radiation, conduction, convection, evaporation
- ↳ cold room temp, cold scale, Bed near Air vent, wet Diaper
- preterm, SGA, Drug exposure

Expected Findings

- Mottling or paler
- poor feeding, Acrocyanosis
- ↳ cool to touch body
- Apnea, Bradycardia, tachypnea
- Restless, lethargy

Cardiac/Resp issues
Laboratory Tests

/

Diagnostic Procedures

/

SAFETY CONSIDERATIONS

- Rewarm Slowly (0.5°C per hour)
- monitor closely (vs 15 mins-30)
- monitor RR & effort
- BS ? O₂ checks
- rapid warming
- ↳ ↑ RIF apnea

PATIENT-CENTERED CARE

Nursing Care

- Reheat in isolette or radiant warmer
- continue warming until @ temp wnl
- set isolette temp 1-1.5°C above core temp

Medications

/

Client Education

- maintain NTE
- keep bb warm
- ↳ hat, 1+ layer than mom/dad

Therapeutic Procedures

/

Interprofessional Care

Complications

- hypoglycemia
- hypoxia

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ACTIVE LEARNING TEMPLATE: System Disorder

STUDENT NAME _____
DISORDER/DISEASE PROCESS Sepsis REVIEW MODULE CHAPTER _____

Alterations in Health (Diagnosis)

Pathophysiology Related to Client Problem
invasion of infectious agents

Health Promotion and Disease Prevention

ASSESSMENT

Risk Factors
PROM
Preterm infant

Expected Findings
cyanosis, apnea
feeding problem, abd distention
rashes, jaundice, decreased
perfusion, hypotension

SAFETY CONSIDERATIONS

Laboratory Tests
Blood cultures

Diagnostic Procedures

PATIENT-CENTERED CARE

Nursing Care handwashing
Thermoregulation
Reverse isolation
Adequate nutrition

Medications
Chemoprophylaxis

Client Education
Strict handwashing

Therapeutic Procedures

Interprofessional Care
Respiratory
Infectious Disease

Complications
septicemia
Prolonged hospitalization
High Mortality

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ACTIVE LEARNING TEMPLATE:

System Disorder

STUDENT NAME _____

DISORDER/DISEASE PROCESS SGA

REVIEW MODULE CHAPTER _____

Alterations in Health (Diagnosis)

< 10th percentile on growth curve

Pathophysiology Related to Client Problem

Symmetrical → normal cells, deficient #
Asymmetrical → small cell size, head larger than body

Health Promotion and Disease Prevention

ASSESSMENT

Risk Factors

Maternal - htn, smoking, malnutrition
Placental - only 1 artery, abnormal cord insertion
fetal - rhesus, multiple gestation

Expected Findings

bigger fontanelles, sunken abdomen, dull hair, wasted appearance, wide-eyed + alert look

SAFETY CONSIDERATIONS

Laboratory Tests

Diagnostic Procedures

Weight, fundal height assessments, head circumference, NST, BPP

PATIENT-CENTERED CARE

Nursing Care

Medications

Client Education

Long term affect + possible learning disabilities

Complications

birth asphyxia
↳ due to chronic hypoxia

hypothermia
↳ lower # of fat stores

polycythemia
↳ body make more RBC r/+ chronic hypoxia

hypoglycemia
↳ ↓ stores

Nutritional problems
↳ ↑ metabolic activity

Therapeutic Procedures

plan for an early delivery + anticipating a small baby

Interprofessional Care

6 ACTIVE LEARNING TEMPLATE: System Disorder

STUDENT NAME _____
DISORDER/DISEASE PROCESS LGA REVIEW MODULE CHAPTER _____

Alterations in Health (Diagnosis)

Large for Gestational Age >4000g >90th percentile

Pathophysiology Related to Client Problem

Health Promotion and Disease Prevention

C/S (cesarean section)

ASSESSMENT

Risk Factors

- genetic predisposition
- Multiparous
- Male
- IDDM
- Erythroblastosis Fetalis
- Transposition of great vessels
- Some post term infants

Expected Findings

- excessive subcut tissue

Laboratory Tests

- blood glucose IVs
- CBC
- Metabolic Panel
- ~~PT/INR~~

Diagnostic Procedures

>4000g typically growth chart ~~then~~

SAFETY CONSIDERATIONS

PATIENT-CENTERED CARE

Nursing Care

ANTICIPATE!

Medications

Client Education

control ~~the~~ Diabetes

Therapeutic Procedures

- early feedings
- b/s screening

Interprofessional Care

Complications

- Birth trauma
 - Shoulder dystocia
- Hypoglycemia
- Polycythemia (chronic hypoxia)
- Hyperbilirubinemia (bubbling from birth)



System Disorder

STUDENT NAME _____

DISORDER/DISEASE PROCESS

Anemia / Hemorrhage

REVIEW MODULE CHAPTER _____

Alterations in Health (Diagnosis)

- anemia

Pathophysiology Related to Client Problem

- low prothrombin due to poor vitamin K synthesis

Health Promotion and Disease Prevention

- is a result of NEC

ASSESSMENT

Risk Factors

- forceps/vacuum assisted births
- fast delivery
- ↓ vit. E and folic acid transfer from mom

Expected Findings

- bulging fontanel

Laboratory Tests

- CBC w/ differential
- Hct
- Hgb

Diagnostic Procedures

- ecmo (↑ risk for hemorrhage)
- through stages

SAFETY CONSIDERATIONS

- monitor for S/Sx
- thorough assessments

PATIENT-CENTERED CARE

Nursing Care

- handle gently
- IM vitamin K
- monitor withdrawal of blood for labs
- blood replacement

Medications

- iron supplements
- supplemental O₂

Client Education

- can resolve spontaneously

Therapeutic Procedures

- blood replacement

Interprofessional Care

- blood donors
- lab, NP, Neuro

Complications

- massive hemorrhage / death