

BUN - 5-20
 Creat - 0.8-1.3
 USG - 1005-1.03

FVD → hypotension, ↑HR, thready pulse, pale skin, ↑ Resp
 tenting, tea colored urine, Shock

→ Isotonic, hypotonic (intracellular fluid loss), ORS, weight & urine

FVE → HTN, bounding pulse, distended neck veins, ↑ Resp

Crackles, pulm edema, cool clammy skin, ↓ USG semi or

→ ↓ fluids, diuretics, daily weights, skin precautions, Fowlers

Solutions: iso hypo hyper

0.9 NS

½ NS

D5 0.45 NS 3% NS

FVE expander ← Lactated Ringer

¼ NS

D5 LR 5% NS

DSW ½ NS

⅓ NS

D5 NS

D10W

Na⁺ 135-145 hyper

→ v/d, Lax, Steroids, antibiotics
 CHF, DI

→ Thirst CNS ↓ ↑ interstitial fluid
 Dry swollen tongue pulm edema
 muscle twitching

→ hypotonic fluids ↓ Na Neuro, tele,

hypo

GI lossess, SIADH, burns,
 Renal failure, Diuretics

CNS - HA SZS Rapid pulse
 postural hypotension
 Skeletal muscle weakness
 ↓ DTR muscle Cramps

hypertonic fluids ↑ Na
 ↓ fluid, Osmotic diuretic
 Isotonic if dehydrated

K^+ 3.5-5 hyper

→ Renal failure, excessive use of salt sub, met acidosis
Oliguria or anuria

→ Anxiety, V Fib, ECG, cramps,
diarrhea, CNS changes, ↑ T waves,
↓ ST, wide QRS, flat P, ↑ P-R

→ Kex, ↓ K (mustard, orange
veg, potatoes, spinach, Raisins,
Tomatoes, Avocados) Insulin IV

hypo

→ dehydration, excessive
V/D, Starvation, Stress,
trauma, burns met alk
diabetic, gastric suctioning
→ weakness, fatigue, N/V
weak pulse, ↓ HR, flat T
wave, CNS

Oral K^+ KCl IV Potassium
Spirinolactone

Ca^{2+} 8.6-10 hyper

→ ↑ Ca^{2+} & Vit D intake, kidney
disease thiazide diuretics
hyperparathy malignancy
glucocorticoids Li^+ Adrenal ↓

→ thirst - hypoaactive BS CNS ↓
↑ interstitial fluid Cardiac changes
kidney stones, muscle weak

→ tele, treat HTN, Neuro, Fluids
phosphorous, ↓ Ca intake, dialysis

hypo

→ ↓ Ca^{2+} & Vit D intake
hypoparathy, CRF
infection, pancreatitis, Alc
preg

→ tetany, Chvostek's
trousseas, muscle twitching
Szs, ECG changes

→ ↑ Ca^{2+} intake ↑ Vit
D, Severe IV Ca^{2+} glue
Szs, could develop
Fractures & osteoporosis

Mg 1.5-2.5 hyper
→ mg antacids Lax
mg sulfate Renal disease
Addison's disease
hypothyroidism

→ ↓ DTR ↓ CNS ↓ neuro
muscular function hypotension
prolonged PR wide QRS

→ calcium carbonate antidotes
♡ dialysis

hypo
→ AIC malabs
malnutrition
hyperaldosterone

→ ↑ DTR, CNS
hyper irritability
HTN, twitches
tetany, SZS ↑
T wave trassedes

→ Mg sulfate

Caps Chem equiv
 Tutoring 1900
 10
 20 Sunday



ACTIVE LEARNING TEMPLATE: System Disorder

STUDENT NAME
 DISORDER/DISEASE PROCESS

Sarah Saunders
 hypovolemic shock

REVIEW MODULE CHAPTER 37

Alterations in Health (Diagnosis)
 Shock due to a hypovolemic state

Pathophysiology Related to Client Problem
 Inadequate tissue perfusion

Health Promotion and Disease Prevention
 - hydrate
 - Educate about signs and symptoms of dehydration

ASSESSMENT

Risk Factors
 - Excessive fluid loss / blood loss
 - Use of diuretics

Expected Findings
 - ↑ HR ↓ BP
 - weak thready pulse
 - ↓ urine output
 - pale flushed skin
 - S/S

Laboratory Tests
 - hemorrhage ↓ Hgb, HCT
 - dehydration ↑ Hgb, HCT

Diagnostic Procedures
 - CT scan
 - blood in stools
 - vitals
 - EKG

SAFETY CONSIDERATIONS

- monitor for changes in status
 - Use infection prevention protocol
 - Fall risk precautions

PATIENT-CENTERED CARE

Nursing Care
 - O₂ - daily weights
 - IV fluids
 - place pt flat w/ legs ↑
 - tele
 - monitor urine output

Medications
 - inotropic agents
 - vasopressin
 - 0.9% NS or LR

Client Education
 - proper hydration
 - complications w/ nursing care

Therapeutic Procedures
 - intubation
 - chest tube
 - surgical interventions

Interprofessional Care
 - respiratory therapy

Complications
 - MODS
 - DIC
 - infection emboli from fluid replacement