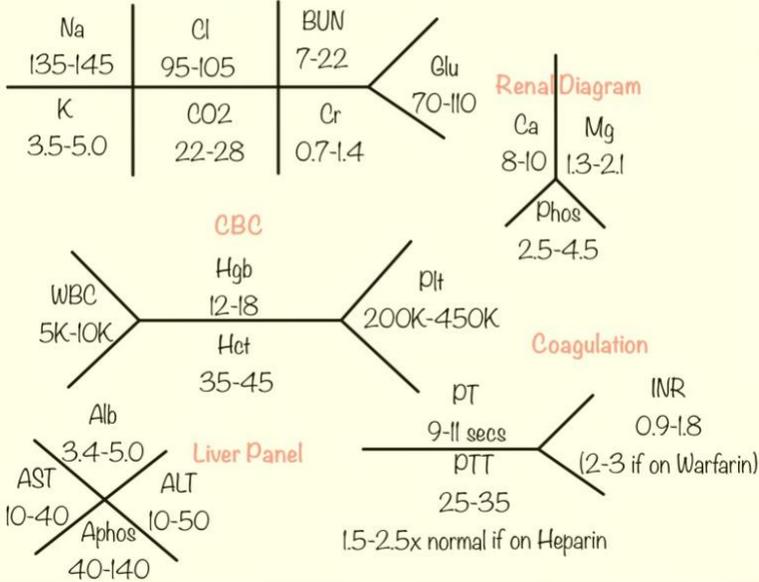


MED/SURG CHEAT SHEET

Basic Metabolic Panel (BMP)



Electrolytes/Lab	Normal Value	S/S of Abnormality
Sodium	135-145	<ul style="list-style-type: none"> ↑ LOC, fatigue, lethargy ↓ stupor/coma, anorexia, lethargy
Potassium	3.5-5	<ul style="list-style-type: none"> ↑ n/v, muscle cramps, arrhythmias, peaked T waves, wide QRS complex ↓ n/v, muscle weakness, dysrhythmias
Magnesium	1.3-2.1	<ul style="list-style-type: none"> ↑ ↓ Deep tendon reflex, RR & HR arrhythmias, muscle paralysis
Calcium	8-10	<ul style="list-style-type: none"> ↓ Tetany, dysrhythmias, Torsade's, ↑ Fatigue, cardiac dysrhythmias, hyperparathyroidism (most common cause)
Phosphorous	2.5-4.5	<ul style="list-style-type: none"> ↓ Tetany, ECG changes ↑ Effects of ↓ Ca (Phosphorous & calcium are inversely proportional) ↓ Effects of ↑ Ca
Ammonia	0-55	↑ Encephalopathy

Normal Vital Signs

BP	<120 mmHg Systolic <80 mmHg Diastolic
HR	60-100
RR	12-20
O2	90%-100% 88%-92% for COPD
Temp	97.8 F-99 F

Heart Rhythm Measurements

PR Interval	0.12-0.2 secs
QRS Complex	0.06-0.12 secs
QT Interval	≤ 0.4 secs

Blood Sugars

Hot & dry → Sugar high
Cold & clammy → needs candy
15/15 Rule: consume 15g of simple carb
(fruit juice or soft drink)

Recheck blood sugar every 15 min after treatment (1hr)

Insulins	Name	Onset	Peak	Duration
Rapid acting Insulin:	Lispro (Humalog)	10-30 min	30 min-1 hr	3-5 hrs
	Aspart (Novolog)			
Short acting Insulin:	Regular (Humulin R, Novulin R)	30-60 min	2-5 hrs	5-8 hrs
	Intermediate acting Insulin:			
	NPH	1-2 hrs	6-12 hrs	12-18 hrs
Long acting Insulin:	Glargine (Lantus)	1-4 hrs	None	24 hrs
	Detemir			

Glargine make it sound long when you say to remember it's "long acting"

Provides PEEP:

positive end expiratory pressure

Low flow Nasal Cannula:

High Flow Nasal Cannula:

Simple Mask:

Nonrebreather Mask:

1-6 LPM

Up to 60 LPM

5-10 LPM

10-15 LPM

O2 Delivery Devices

First line when appropriate. Low-flow device (smallest flow rate). May cause drying of the nares

Cranked up to high flow rates. Can heat gas to 37 C w/ 100% humidity (can be a little intense)

Low-flow rate. Used for stable patients with consistent respiratory rate, provides 40-60% O2

Delivers 60-100% O2. One way flaps prevent room air from collecting within the mask during inspiration, & retention of CO2 during exhalation

Gold standard for COPD pt

May add humidity

used for emergencies

Fluid & Electrolytes:

Intravascular: fluid inside the blood vessel

Intracellular: fluid inside the cell (most of the body's fluids)

Extracellular: fluid outside the cell (interstitial fluid [fluid between the cell], blood, bone, connective tissue, water)

Isotonic 0.9% NS, D5W, Lactated Ringers (LR)

Hypotonic 0.45% NS, 0.33% NS

Hypertonic 3% NS, 5% NS, D10W, D5W with 1/2 NS D5LR

Colloid Dextran, Albumin

Monitor patients with severe diarrhea &/or vomiting for electrolyte imbalances

No osmotic force = water doesn't move in or out of cell

More dilute solutions (more water than solute) = water moves into cells → monitor for edema

More concentrated solution (more solute than water) = water moves out of cells

Fluid moves from interstitial to intravascular compartment → given for severe hypovolemia

Staging Pressure Ulcers

Stage 1	<ul style="list-style-type: none"> Non-blanch-able with reddened area Intact Skin
Stage 2	<ul style="list-style-type: none"> Partial thickness skin loss involving epidermis, dermis, or both May look like as a blister or abrasion
Stage 3	<ul style="list-style-type: none"> Full thickness skin loss Involves damage to or necrosis of sub-q tissue (fat layer may be visible)
Stage 4	<ul style="list-style-type: none"> Full thickness skin loss Including bone, tendon, or muscle showing
Unstageable	<ul style="list-style-type: none"> Full thickness with slough (scabbing) or escher (necrotic tissue)