

NCLEX: Quick Facts

Test Taking Skills:

- reword the question
- go through each answer choice & eliminate
- don't scan for expected words – "most accurate" may trick you
- recognize normal – "Is this an expected outcome based on meds, conditions?" it may be abnormal for other patients but if it is expected based on the treatment it is not necessary to intervene or notify a physician
- identify the topic of the question – it is often unstated
- ask "what should I be thinking?"
- don't use real world experience
- take care of the client first then the equipment

Strategies for Priorities:

Maslow Hierarchy of Need

1. Physiological Needs
 2. Safety & Security
 3. Love & Belonging
 4. Self Esteem
 5. Self actualization
- Look at all answer choices
 - Eliminate all psychosocial answer choices
 - "Does this make sense?"
 - Apply ABCs

Nursing Process (Assessment vs. Implementation)

Assessment: takes priority

Implementation: care you provide to your clients

- Read the answer choices to establish a pattern- if the answer choices are a mix of assessment/validation & implementation, use this strategy
- Refer to the question to determine whether you should be assessing or implementing
- Eliminate answer choices & select the best answer

Safety

When answering questions about procedures, this strategy will help you to establish priorities

- Are all the answer choices implementation? If so use this strategy
- Can you answer the question based on knowledge?
- "What will cause the client the least amount of harm?"
- Waiting and checking later is almost never right, if something is recommended by someone and you disagree, go to the higher up

Strategies for Management of Care:

- Do not delegate assessment, teaching, evaluation, or nursing judgment
- Delegate tasks that involve standard, unchanging procedures and patients with expected outcomes
- A nursing assistant can be delegated activities related to bladder training, monitoring ins & outs, mouth care, feeding
- Clients who are being discharged and admitted should have final assessments done by the RN
- LPN can monitor clients w/ IV therapy, insert urinary catheters, feeding tubes & apply restraints, can reinforce but not teach initially
- When patient is in distress, administration of medication is rarely the best choice
- Always check for allergies before administering antibiotics
- Nurses cannot tell patients of diagnosis, physicians can

Strategies for Position Patient:

- Decide if you are trying to prevent or promote?
- What are you trying to prevent or promote?
- Think A & P

Strategies for Communication Questions

- Eliminate don't worry
- Eliminate explore answers
- Don't ask why
- Eliminate authoritarian answers
- Eliminate "focus on" answers
- Eliminated close ended questions

Vital Signs

Heart Rate: 60 – 100 BPM

Respiratory rate: 12-20 RPM

Blood Pressure: 110-120/ 60-80 mmHg

Temperature: 36 (98.6)

Hematology Values

RBCs: 4.5-5.0 million

WBCs: 4,500-10,000

Platelets: 100,000 -450,000

Hemoglobin: m- 14-18 gm f – 12-16 gm

Hematocrit: m: 42-52%, f: 36-44%

T Cell count: 500-10000, <400 immunocompromised

ESR (inflammation): m: 0-29 mm/hr. f: 0-22 mm/hr.

Serum Electrolytes

Sodium: 135-145 mEq/L

- Hyponatremia: edema, orthostatic hypertension, stomach cramping, oliguria, dizziness, lethargy, hypertension, increased SG (seen in SIADH)
- Hypernatremia: thirst, fluid depletion, polyuria, decreased SG, hypotensive (seen in Diabetic Insipidus)

Potassium: 3.5-5 mEq/L

- Hypokalemia: alkalosis, confusion, arrhythmias, decreased T wave & U wave, tremors, convulsion, hypotension, tachycardia
- Hyperkalemia: acidosis, muscle weakness, increased T wave, hypertension, tremors, acidosis, bradycardia

Calcium: 8.5-10 mEq/L

- Hypocalcemia: Convulsions, tremors, Trousseau (BP cuff) Chvostek (stroke face), ataxia, numbness & tingling
- Hypercalcemia: bone pain, stomach discomfort, confusion, kidney stones

Chloride: 95-105 mEq/L

- High chloride: seizures
- Low chloride: metabolic acidosis

Magnesium: 1.6-2.6 mEq/L

- Hypomagnesium: convulsions, ataxia, tremors, numbness & tingling, spasms, stridor, depression, dig. Toxicity, arrhythmias, vomiting

- **Hypermagnesium:** Depresses the CNS, hypotension, facial flushing, muscle weakness, absent deep tendon reflexes, shallow respirations diarrhea

Phosphorous: 2.5-4.5 mEq/L

- **Hypophosphatemia:** kidney stones, abdominal discomfort, confusion
- **Hyperphosphatemia:** convulsions, tremors, positive Trousseau (BP cuff) & Chvostek sign (stroking face), ataxia

ABG Values

pH: 7.35-7.45 PaO₂: 80-100
 HCO₃: 24-28 SaO₂: > 95 %
 CO₂: 35-45

Chemistry Values

Glucose: 70- 110 mg/dl
 Specific Gravity: 1.010-1.030
 Urinary output: ~ 30-40 ml/hr.; 8000-2000 ml/day
 BUN: 6-22 mg/dl

- High BUN can cause confusion, orthostatic hypotension, disorientation etc.

Serum Creatinine: 0.6-1.3 mg/dL
 LDH: 100-190 U/L
 Protein: 6.2-8.1 g/dL
 Albumin: 3.4-5.0 g/dL

- Low albumin causes edema

Bilirubin: less than 1.0 mg/dL, less than 15 in newborn
 Total Cholesterol: 130-200 mg/dL
 Triglyceride: 40-50 mg/dL
 HDL: above 40 mg/dL
 Uric Acid: 3.5-7.5 mg/dL
 Creatinine Phosphokinase: 0-3 ng/mL

Therapeutic Drug Levels

Carbamazepine (Tegretol): 4-10 mcg/mL
 Use: anticonvulsant

Valporic Acid: 50-100 mcg/ml
 Use: anticonvulsant

Phenytoin (Dilantin): 10-20 mcg/dL
 Use: anticonvulsant

Lithium: 0.8-1.5 mEq/L
 Use: bipolar

Signs of toxicity: ataxia, slurred speech, muscle weakness, sedation, vision probs, tremors, headache

Digoxin (Lanoxin): 0.5-2.0 ng/mL

Use: blood pressure & antiarrhythmic

Signs of toxicity: nausea, vomiting, visual problems, headache, confusion, hypokalemia, hypomagnesemia
 Phenobarbital: 15-40 mcg/mL

Use: anti-anxiety

Theophylline: 10-20 mcg/dL

Use: bronchodilator

Signs of toxicity: tachycardia, anxiety

Gentamycin: peak 5-10 valley 2.0 mcg/ml

Use: antibiotic

Tobramycin: peak 5-10 valley 0.5-2.0 mcg/mL

Use: antibiotic

Vancomycin: peak 20-40 trough 5-15 mcg/mL

Use antibiotic

Anticoagulant Therapy/Values

Protime: 10-15

- W/ Warfarin: 15-30
- Antidote: vitamin K

INR: 0.8-1.2

PTT: 30-45 seconds

- w/heparin: 45-90

- antidote: protamine sulfate

APTT: 23.3-31.9 seconds

Fibrinogen Levels: 230-377 mg/dL

Conversions

1 teaspoon = 5 ml

1 tablespoon = 3 tsp = 15 ml

1 ounce = 30 ml

1 cup = 8 ounces

1 quart = 2 pints

1 pint = 2 cups

1 gram = 1000 mg

1 kg = 2.2 lbs.

1 lb. = 16 ounces

Ice chips = half the volume

C to F: $C + 40 \times \frac{9}{5} - 40$

F to C: $F + 40 \times \frac{5}{9} - 40$

1 grain = 60 mg

Maternity Normal Values

Fetal Heart rate: 120-160 bpm (if there is fetal distress turn the mother to the left side)

Variability: 6-10 bpm

VEAL CHOP

Amniotic fluid: 500-1200 ml

PKU can be measured after protein is ingested

Contractions: 2-5 min apart w/ duration of less than 90 seconds (too slow can cause hypoxia)

Precipitous labor can cause hemorrhoid

Normal progression 1-1.2 cm/ hour, effacement → descent → dilation

APGAR score: norm: 8-10, low: 5-critically low: 3 & below

Umbilical cord - veins: 1, arteries: 2

Lochia rubra: pure blood, first few days

Lochia serosa: 4-7 days

Lochia alba: decreased blood & increase leukocytes in final stage of lochia 7-10 days

Contraindicated in pregnancy: Rifampicin (Rifampin), Theophylline, Accutane, Thalomid (Immunoprin), *Premature:* extremities extended instead of flexed

Gravity: # of pregnancies regardless of outcome.

Para # pregnancies that reached viability (20 weeks)

Development Milestones

2-3 months: hold head up, turns to sound

4-5 months: roll from tummy to back, babbling

6-7 months: sits at 6 & waves bye bye. Passes things back & forth between hands

8-9 months: stands straight at eight, has favorite toy, plays peek-a boo

10-11 months: belly to butt

12-13 twelve & up, drinks from a cup, cries when parents leave, uses furniture to cruise

15: can starts walking

Erikson's Stages of Development

Stage	Basic Conflict	Important Events	Outcome
Infancy (birth to 18 months)	Trust vs. Mistrust	Feeding	Children develop a sense of trust when caregivers provide reliability, care, and affection. A lack of this will lead to mistrust.
Early Childhood (2 to 3 years)	Autonomy vs. Shame and Doubt	Toilet Training	Children need to develop a sense of personal control over physical skills and a sense of independence. Success leads to feelings of autonomy, failure results in feelings of shame and doubt.
Preschool (3 to 5 years)	Initiative vs. Guilt	Exploration	Children need to begin asserting control and power over the environment. Success in this stage leads to a sense of purpose. Children who try to exert too much power experience disapproval, resulting in a sense of guilt.
School Age (6 to 11 years)	Industry vs. Inferiority	School	Children need to cope with new social and academic demands. Success leads to a sense of competence, while failure results in feelings of inferiority.
Adolescence (12 to 18 years)	Identity vs. Role Confusion	Social Relationships	Teens need to develop a sense of self and personal identity. Success leads to an ability to stay true to yourself, while failure leads to role confusion and a weak sense of self.
Young Adulthood (19 to 40 years)	Intimacy vs. Isolation	Relationships	Young adults need to form intimate, loving relationships with other people. Success leads to strong relationships, while failure results in loneliness and isolation.
Middle Adulthood (40 to 65 years)	Generativity vs. Stagnation	Work and Parenthood	Adults need to create or nurture things that will outlast them, often by having children or creating a positive change that benefits other people. Success leads to feelings of usefulness and accomplishment, while failure results in shallow involvement in the world.
Maturity (65 to death)	Ego Integrity vs. Despair	Reflection on Life	Older adults need to look back on life and feel a sense of fulfillment. Success at this stage leads to feelings of wisdom, while failure results in regret, bitterness, and despair.

Medication Warnings/ Remember:

Never give Potassium IV push.

Seizure meds need to be given first; strict schedule.

Never crush an enteric coated med or capsule!

All hypertensive look for orthostatic hypotension and low HR

Miotics: Constricts the pupils

Mydriatics: Dilates the pupils

Permethrin: anti scabies

ACE inhibitors: side effects Hypercalcemia, decreased aldosterone levels, hyperkalemia & cough

Digoxin: assess pulse for a full minute, if less than 60 bpm hold dose. Check digitalis potassium levels (hypokalemia), takes 1-2 days to be eliminated.

Watch for nausea, vomiting & dysrhythmias.

Contraindicated with loop & thiazide diuretics, ACEs, some calcium channel blockers, ARBS, quinidine, paroxetine ARBS, quinidine

Calcium Channel blockers: no grapefruit juice

Hydralazine (antihypertensive): take with food and OTC meds should be avoided

Clopidogrel (blood thinner): monitor hemoglobin and hematocrit

Amiodorone: ventricular tachycardia

Dopamine: hypotension, shock, low cardiac output.

Theophylline: empty stomach w/ water, check all OTC meds, avoid alcohol, smoking caffeine contra indicated with macrolide abx (-mycin)

Ipratropium (inhaled anticholinergic): contraindicated with clients with peanut allergies, narrow angle glaucoma & BPH

Imipramine: Tricyclic antidepressant used to treat panic attacks

Hydroxyzine: treatment of anxiety & itching, side effect –dry mouth

Chlorpromazine: antipsychotic med

Haloperidol antipsychotic - drowsiness; insomnia, weakness; headache; & extrapyramidal symptoms, (akathasia, tardive dyskinesia & dystonia)

Tyramine or purines w/ MAOIs causes hypertension

Carbamazepine: side effects risk of Steven's Johnson syndrome & bone marrow suppression, liver damage & dry mouth

Amitriptyline: antidepressant

Benzotropine: antiparkinsonian medication which manages extrapyramidal symptoms (dry mouth, urinary retention)

Midazolam: conscious sedation, side effects:

respiratory depression & hypotension

No morphine in pancreatitis → spasms of the

Sphincter of Oddi. Demerol instead

Morphine overdose: decreased respirations, pinpoint pupils

Naloxone: stops narcotic induced respiratory distress

Chlordizepoxide Hydrochloride (Librium): used for alcohol withdrawal

Methadone: treats narcotic withdrawal

Clozapine (anticonvulsant): blood dyscrasia (bleeding and low WBC), signs of infection are paramount

Phenytoin (Dilantin): take w/ or immediately after meals, do not use antacids or Antidiarrheals w/in 2 hours, folic acid supplement may be needed, metabolized by liver

Allopurinol: safe to crush, need to increase fluid intake, dairy products, refined sugar & meat should be limited, take w/ food but not milk or iron

Statins: no grapefruit juice, administered in the evening without meals, except lovastatin with meals

Ranitidine (Zantac): false positives/negative for tests, should be taken after meals, avoid smoking,

ASA(aspirin), caffeine, NSAIDS, Phenytoin

Niacin (vit. B3): adverse effects: hyperglycemia,

hepatotoxicity, hyperurecemia

Prilosec (proton pump inhibitor, decrease acid): take 30 minutes before eating, do not take w/Phenytoin

Pancrelipase: don't crush, take w/ water & food, contraindicated in pork allergy

Dexamethasone: morning with meals

Aluminum Hydroxide: (GERD & kidney stones) watch out for constipation

Cisplatin (chemo med): hold if platelet count is less than 100,000, WC count is less than 4000 & if creatinine is greater than 1.5

St. John's Wort: contraind. with digoxin, nefedipine, simvastatin, and lexapro

Macrolides (like amikacin, gentamycin, tobramycin) nephrotoxic, ototoxic, really excreted so reduce

normal flora by nausea & diarrhea → stunts vit. K & increases warfarin, avoid penicillin & loop diuretics

Rifampicin: causes red orange tears & urine

Ethambutol: causes problems w/ vision, liver

Isoniazid: can cause peripheral neuritis, take vitamin B6 to counter

Acyclovir- antiviral: given 5 times a day & may cause nausea & vomiting so should be given w/ food

Tetracyclines: interacts with milk, antacids &

magnesium

Fluoroquinolones (ciprofloxacin): photosensitivity,

ototoxicity, nephrotoxicity & hypersensitivity

Cyclosporine: antirejection drug, used if allergic to penicillin

Aminoglycoside (Neomycin): treats infections caused by intestinal bugs

Cephalosprins: contraindicated if penicillin allergy

Common Diets

Chicken is a relatively low protein meat

Acute Renal Disease—protein-restricted, high-calorie, fluid, sodium & potassium controlled.

Chronic Renal Disease—protein restricted, low-sodium, fluid-restricted, potassium-restricted,

phosphorus restricted.

Addison's disease—increased sodium, low potassium
ADHD & Bipolar—high-calorie & finger foods
Wounds—high protein, caloric, & Vitamin C.
Cancer—high-calorie, high-protein
Celiac Disease—gluten-free
Cirrhosis (stable)—normal protein
Cirrhosis w/ hepatic insufficiency— restrict protein, fluids, & sodium.
Constipation—high-fiber & fluids
COPD—soft, high-calorie, low carbohydrate, high-fat, small frequent feedings
Cystic Fibrosis—increase in fluids.
Dumping Syndrome—low carbs, smaller meals, increase fat and protein
Diarrhea—liquid, low-fiber, regular, fluid & electrolyte replacement
Duodenal ulcer—not restricted, as tolerated
Gallbladder—low-fat, calorie restricted, regular
Gastritis—low-fiber, bland diet
Hepatitis—regular, high-calorie, high protein
Hyperlipidemias—fat-controlled, calorie restricted
Hypertension, heart failure, CAD—low sodium, calorie-restricted, fat-controlled
Kidney Stones—increased fluid intake, calcium-controlled, low-oxalate
Nephrotic Syndrome—sodium-restricted, high-calorie, high-protein, potassium restricted.
Obesity, overweight—calorie-restricted, high-fiber
Pyloric Stenosis:small, frequent feedings
Pancreatitis—low-fat, regular, small frequent feedings; tube feeding or total parenteral nutrition.
Peptic ulcer—bland diet
Pernicious Anemia—increase Vitamin B12 (Cobalamin), in shellfish, beef liver, & fish.
Sickle Cell Anemia—increase fluids to maintain hydration since sickling increases when patients become dehydrated.
Stroke—mechanical soft, regular, or tube-feeding.
Underweight—high-calorie, high protein Vomiting—fluid & electrolyte replacement

Positioning Patients


Asthma: orthopenic position (patient is sitting up & bent forward w/ arms supported on a table or chair)
Post Bronchoscopy: flat on bed w/ head hyperextended
Brain scan: supine with pillow behind head
Cerebral Aneurysm: high Fowlers
Hemorrhagic Stroke: HOB elevated 30 degrees to reduce ICP
Ischemic Stroke: HOB flat
Cardiac Catheterization: keep site extended
Epistaxis: lean forward
Amputation: elevate for first 24 hours w/ pillow, position on prone daily for hip extension
Tube Feeding- Patients w/ decreased LOC: position patient on right side to promote emptying of stomach w/ HOB elevated to prevent aspiration
Air/ Pulmonary Embolism: turn patient to left side & lower HOB
Postural Drainage: lung segment to be drained to be in the upmost position to allow gravity to work
Post Lumbar puncture: patient should lie flat in supine to prevent headache & leaking of CSF
Continuous Bladder Irrigation: catheter should be taped to thigh so leg should be kept straight
After myringotomy: position on side of affected ear after surgery (allows for drainage of secretions)
Post cataract surgery: do not lean head forward because it increases intraocular pressure, patient will sleep on unaffected side w/ night shield for 1-4 weeks, keep ICP low, no cough/ deep breath, eye movement
Detached Retina: area of detachment should be in the dependent position
Post thyroidectomy: low or semi fowlers, support head, neck & shoulders
Thoracentesis: sitting on the side of the bed & leaning over table after affected side up
Spina Bifida: prone so the sac does not rupture
Buck's Traction: elevate foot of bed
Bryant's Traction: buttocks slightly elevated off bed
Post Total Hip Replacement: don't sleep on operated side, don't flex hip more than 45-60 degrees, don't elevate HOB more than 45 degrees, maintain hip

abduction separating thighs pillow
Prolapsed Cord: reverse Trendelenburg
Tonsillectomy: side – lying
Cleft Lip: position back or in infant seat to prevent trauma to the suture line. While feeding, hold in upright position
Cleft Palate: prone
Hemorrhoidectomy: assist to lateral position
Hiatal Hernia: upright position
Preventing Dumping Syndrome: eat in reclining position, lie down after meals
Enema Administration: left lying Sims, w/ knees flexed
Post Supratentorial surgery: elevate HOB 30-45
Post infratentorial surgery: position patient flat & lateral on either side
Increased ICP: high fowlers
Laminectomy: back as straight as possible, log roll
Spinal Cord Injury: immobilize on spine board & C collar, w/ head in neutral position, log roll
Liver biopsy: right side lying w/ pillow or small towel under puncture site for at least 3 hours
Paracentesis: flat on bed or sitting
Intestinal Tubes: place patient on right side to facilitate passage into duodenum
Nasogastric Tubes: elevate HOB 30 degrees to prevent aspiration
Pelvic Exam: lithotomy position
Rectal Exam: knee chest position, Sim's, or dorsal recumbent
During internal radiation: patient bed rest
Autonomic Dysreflexia: sit up, neurogenic bladder
Shock: bed rest w/ extremities elevated 20 degrees, knees straight, head slightly elevated (modified Trendelenburg)
Head injury: elevate HOB 30 degrees to decrease intracranial pressure
Peritoneal Dialysis (w/ inadequate outflow): turn patient side to side
Myelogram:
 water based dye – semi fowlers for 8 hours
 oil based dye – flat for 6-8 hours to prevent CSF leak
 air dye- Trendelenburg

- ask if taking meds that lower seizure threshold (antipsych)

Diagnostic Testing

When removing things instruct to do the Valsalva maneuver

 **Angiography** (Arteriography): indicates abnormalities of blood flow due to arterial obstruction or narrowing

- Contrast dye is injected into the arteries & x-ray films are taken of the vascular tree

Swans Ganz: measures cardiac output, pressure in left ventricle and pulmonary artery

Central Venous Pressure: measures pressure in right atrium, normal is 4-10 cm/H₂O

Pulmonary function: detects impaired pulmonary function; follows the course of pulmonary disease & evaluates treatment responses

- No smoking four hours before test
- May w/hold bronchodilator medication
- Observe for dyspnea

Bronchoscopy: allows visualization of larynx, trachea, & main stem bronchi; possible to obtain tissue biopsy, apply medication, aspirate secretions for laboratory examination, aspirate a mucus plug causing airway obstruction, or remove aspirated foreign objects

- NPO for six hours before test
- Administer premedication –valium, versed, Demerol, atropine
- Sit or lie on side, remain NPO until gag reflex returns


Thoracentesis: Aspiration of fluid or air from pleural space; to obtain specimen for analysis relieve lung compress obtain lung tissue biopsy, or instill medications into pleural space

- Position client sitting w/ arms on pillows on over bed table or lying on side in bed
- Expect stinging sensation
- Auscultate breath sounds frequently
- Sterile dressing after procedure

Chest x-ray: to identify abnormalities such as foreign bodies, fluid, infiltrates, tumors

- Remove all jewelry

Lung biopsy: pre-medication, performed w/ fluoroscopic monitoring

 **CT**: provides three dimensional assessment of the lungs & thorax

- Assess the client for claustrophobia
- MRI*: provides detailed pictures of body structures
- Explain procedures, needs consent
 - Assess the client for claustrophobia
 - Contraindicated if a patient has metal implanted in body

Cardiac catheterization: usually used w/ angiography: introduction of catheter into chambers of the heart to evaluate ventricular function & obtain chamber pressure


- Bed rest for 6-8 hours w/in insertion

Cerebral angiography: identifies aneurysm, vascular malformations, narrowed vessels


- Keep flat in bed 12-14 hours afterwards

Lumbar Puncture: insertion of needle to subarachnoid space to obtain specimen, relieve pressure, inject dye or medication


- Lateral recumbent fetal position at edge of bed
- EEG*: records electrical activity of brain
- Patient needs to stay up before
 - Tranquilizer & stimulant medications w/held for 24-48 hours pre- EEG
 - Meals not w/held
 - Echoencephalography: evaluates brain structure through sound waves


 **Myelogram**: visualizes spinal column & subarachnoid space

- NPO for 4-6 hours before test
- Phenothiazine's, CNS depressants & stimulants w/held for 48 hours before test
- Assess for distended bladder


 **PET**: used to assess metabolic & physiological function of brain; diagnose stroke, brain tumor, epilepsy, Parkinson's disease, head injury

- Client inhales or is injected w/ radioactive substance, then is scanned

 **Liver scan**: to demonstrate size, shape of liver, visualize scar tissue, cysts, or tumors

 **Cholecystogram/ Cholangiography**: for gallbladder & bile duct visualization

- Radiopaque material injected directly into biliary tree
- Fat free dinner & NPO after dye ingestion

 **Celiac Axis arteriography**: liver & pancreas visualization

Liver biopsy: Sampling of tissue by needle aspiration

- Administer vitamin K IM to decrease chance of hemorrhage
- NPO for 6 hours the morning of exam
- Client will be asked to hold his breath for 5-10 seconds
- Position on right side for 2-3 hours w/ pillow under costal margin

Sigmoidoscopy/Proctoscopy: direct visualization of the sigmoid colon, rectum, & anal canal

Colonoscopy: direct visualization of the colon used as a diagnostic aid; removes foreign bodies, polyps or tissue for biopsy

Upper GI series barium swallow: ingestion of barium sulfate to determine patency & size of esophagus, size & condition of gastric walls, potency of pyloric valve, & rate of passage to small bowel


- Stool will be light colored after procedure

Lower GI series barium enema: instillation of barium into colon via rectum for fluoroscopy x-rays to view tumors, polyps, strictures, ulcerations, inflammation or obstruction of colon

- Low residue diet for 102 days

Paracentesis: needle aspiration of fluid in abdominal cavity used for diagnostic examination of ascetic fluid & treatment of massive ascites resistant to other therapies

- Done at bedside
- Client in semi-fowler's position or sitting upright on edge of bed
- Empty bladder prior to procedure

 **IV Pyelogram:** provides x-ray visualization of kidneys, ureters, & bladder

- Bowel prep
- NPO after midnight
- burning or complaints of salty taste may occur during injection

Schilling test: diagnoses vitamin B12 deficiency (pernicious anemia)

Radioactive vitamin B12 is administered

Tonometry: pressure in the eyes

Fluorescentes: measures circulation in the retina

Common Signs & Symptoms:

GERD (risk factors): female, over 45, obese, Caucasian, smoking

Stroke (risk factors): male, African American, age, smoker, drinker, bedridden immunocomp.

Tuberculosis: low grade fever, night sweats

Pneumonia: rust colored sputum; risk factors: underlying lung disease, advanced age, bedridden, immunosuppressed, postop

Asthma: wheezing on expiration

Emphysema: barrel chest, pink puffer

Kawasaki Syndrome: strawberry tongue

Pernicious Anemia: red, beefy tongue,

Down Syndrome: protruding tongue

Cholera: rice-watery stool & washer woman's hands

Malaria: step-ladder like fever w/ chills

Typhoid: rose spots in the abdomen

Dengue: fever, rash, headache. + Herman's sign

Diphtheria: pseudo membrane formation

Measles: clustered white lesions on buccal mucosal

Herpes Zoster: to be immune must have had chicken pox

Lupus: butterfly rash, proteinuria and hyperlipidemia

Leprosy: leonine faces (thickened folded facial skin)

Bulimia: chipmunk faces

Appendicitis: rebound tenderness at McBurney's point Rovsing's sign (palpation of LQ elicits pain in the RLQ), Psoas sign (pain from flexing the thigh to the hip)

Meningitis: Kernig's sign (stiffness of hamstrings causing inability to straighten the leg when the hip is flexed), Brudzinkis sign (forced flexion of the neck elicits a reflex flexion of the hips)

Tetany: hypocalcemia, hypomagnesaemia,

Trousseau's sign, Chvostek sign

Renal Failure: oliguria then diuretic phase

Pancreatitis: Cullen's sign (ecchymosis of the umbilicus), Grey Turner's sign (bruising of the flank)

Pyloric Stenosis: olive like mass

Patent Ductus Arteriosus: washing machine murmur

Addison's Disease: bronze like skin pigmentation

Cushing's Syndrome: moon face & buffalo hum

Grave's Disease (Hyperthyroidism): exophthalmos

Intussusception: sausage-shaped mass

Gout: pain in the big toe

Hirschsprung's disease (toxic mega colon) – ribbed like stool

Multiple Sclerosis: Charcot's triad: nystagmus, intention tremor, dysarthria

Myasthenia Gravis: descending muscle weakness, ptosis (drooping of the eyelids)

Guillain Barre: ascending muscle weakness, caused by previous infection or vaccine

Deep Vein Thrombosis: Homan's sign

Angina: crushing pain relieved by NTG

Myocardial Infarction: crushing, stabbing pain radiating to left shoulder neck & arms

Parkinson's disease: pill rolling tremors

Cytomegalovirus (CMV) infection: owl's eye appearance of cells

Glaucoma: tunnel vision

Retinal Detachment: flashes of light, shadow w/ curtain across vision

Basilar Skull Fracture: raccoon eyes, & battle's sign

Beurger's Disease: intermittent claudication

Diabetic Ketoacidosis: acetone breath

Pregnancy Induced Hypertension: proteinuria, hypertension, edema

Diabetes Mellitus: polydipsia, polyphagia, polyuria

Gastro esophageal Reflux disease: heart burn

Sexual Transmitted Infections:

Herpes Simplex Type II: painful vesicles on genitalia

Genital Warts: warts 1-2 mm in diameter

Syphilis and Chancroids: painless chancres

Gonorrhea: green, discharges & painful urination

Chlamydia: milky discharge & painful urination

Candidiasis: cheesy odorless vaginal discharges

Trichomoniasis: yellow, itchy, frothy, & foul smelling vaginal discharges

Pneumocystis Jiroveci and Kaposi Sarcoma occur in patients with AIDS

Specific Reminders:

Distal forearm is a good place for administering an IV and the vastolateralis is a good place for administering an IM injection

Fire- RACE: remove the patient, activate the alarm, contain the fire, extinguish the fire

Air embolism occurs when a central line is dislodged

Fat embolism: occurs in fracture (first 24 hr.) before avascular necrosis (after 48 hr.)

Wheezing on inspiration = occlusion

Flank pain = kidneys

Latex allergy, alert for banana allergy

Fluids

Isotonic: D5W, 0.9% NS

- go to vascular space
- Lactated ringers: in pregnancy increase oxygenation and blood viscosity, favorite in shock

Hypotonic: .45% NS, 0.3% NS, D2.5W

- Shift into cells

Hypertonic: D10, 3% NS, DL5R

- Shift out of cells into the vasculature

Psych

Projection: unconscious assigning of a thought, feeling, or action to someone or something else.

Sublimation is the channeling of impulses in socially acceptable behaviors.

Repression: unconscious defense mechanism where painful thoughts, impulses, memories, or feelings are pushed from the consciousness or forgotten.

Dissociation: splitting of anxiety producing experiences

Depersonalization: feelings of unreality concerning self/environment

Double bind communication: characterized by simultaneous communication of two mutually conflicting verbal and nonverbal messages, opposite of functional process

Scapegoating: blames others for problems

Ethics:

Nonmaleficence: duty to do no harm

Beneficence: duty to do what is in the best interest of the client.

Autonomy: the right of individuals to make their own decisions regarding care and treatment.

Capacity: client's ability to make medical decisions.

Justice: Fair, equitable and appropriate treatment

Virtues: refers to compassion, trustworthiness, integrity, and veracity

Fidelity: refers to keeping faithful to ethical principles and the American Nurses Association Code of Ethics for Nurses

The Patient Self-Determination Act: patients are informed of their right to refuse treatment and (in advance directives) to specify their treatment wishes

The Patient's Bill of Rights: includes a provision that the client is responsible for providing information about medications and past illnesses

Advocacy: protect the best interests of the client as well as to protect a client's right to make decisions; shown through teaching and speaking up

Management of Care

Case management: coordinates the care, improves outcomes, and reduces cost but does not initially plan the care of the client

Collaboration: defines the multidisciplinary team approach to building a plan of care for the client

Cultural Considerations:

African Americans—supernatural causes for illness & seek advice & remedies from faith healers; family oriented; higher incidence of high blood pressure & obesity; high incidence of lactose intolerance.

Arab Americans—remain silent about problems such as STIs, substance abuse, & mental illness; may interpret illness as the will of Allah, a test of faith; may rely on ritual cures or alternative therapies before seeking help from health care provider; after death, prepare the body by washing & wrapping the body in unsewn white cloth; postmortem examinations are discouraged unless required. May avoid pork & alcohol if Muslim; observe Ramadan (begins mid-October); people suffering from chronic illnesses, pregnant, breast-feeding, or menstruating don't fast. Females avoid eye contact w/ males; use same-sex family members as interpreters.

Asian Americans—value ability to endure pain & stoicism; family oriented; extended family involved in care of dying patient; believes in "hot cold" yin/yang often involved; sodium intake is generally high; believe prolonged eye contact is rude & an invasive; nod w/o necessarily understanding; prefer to maintain a comfortable physical distance between the patient & the health care provider.

Latino Americans—view illness as a sign of weakness, punishment for evil doing; consult w/ a curandero or voodoo priest; family members are involved in aspects of decision making; see no reason to submit to mammograms or vaccinations.

Native Americans—medicine man to determine the true cause of an illness; value the ability to endure pain w/ stoicism; diet deficient in vitamin D & calcium because many suffer from lactose intolerance or don't drink milk; obesity & diabetes are major health concerns; divert eyes to the floor when they are praying or paying attention.

Western Culture—value tech in the struggle to conquer diseases; health is understood to be the absence, minimization, or control of disease process; three daily meals is typical.