NR 511 MIDTERM REVIEW

- Actinic keratosis: pre-cancerous lesion. The main assessment technique is INSPECTION, which will show as flesh colored, hard and sand paper like.
 - TX: cryotherapy
 - Risk factor: sun exposure, can progress to squamous cell carcinoma
 - Referrer pt to dermatology to prevent progression
- **Fungal skin infection:** assess rash and satellite lesions.
 - DX: based on clinical presentation, most common is candida albicans
 - Tx: antifungal cream, pills, keep area as dry as possible. The fungus likes moisture and poor air circulation
 - At risk: opportunistic, pts who are immunocompromised, older and younger pts, diabetics, and antibiotic therapy.
 - Refer patient if there's no improvement
- Common types of fungal infections:
 - <u>Tinea vesicolor</u>: flat to slightly elevated brown papules and plaques that scale when they are rubbed along with areas of hypopigmentation, pruritic, most commonly found on trunk and shoulders.
 - <u>Balanitis:</u> candidiasis in the glands of the penis
 - <u>Tinea corporis:</u> annual lesions with scaly borders and central clearing on the trunk
 - <u>Tinea pedis:</u> athlete's foot, and between toes
 - <u>Tinea cruis:</u> jock-itch groin
- Bacterial skin infections: warm, red, painful w/o sharply demarcated border
 - <u>Cellulitis</u>: is a spreading infection of the epidermis and sub-cut tissue that usually begins after a break in the skin.
 - Folliculitis: bacterial infection of the hair follicle, papules are characteristics of folliculitis
- Viral skin infections
 - <u>Erythema infectiosum (fifth disease)</u> erythematous, warm rash, gives the appearance of slapped cheeks. Sore throat, slight fever, upset stomach, headache, fatigue, and itching. Resolves on its own.
 - <u>Varicella rash:</u> contagious 48 hours before the onset of the vesicular rash, during the rash formation and during the several days it takes the vesicles to dry up. Characteristics rash appears 2-3 weeks after exposure.
 - <u>Warts:</u> caused by the human papillomavirus, most warts recur despite treatment. Contrary to popular opinion, warts do not have roots, the underside of a wart is smooth and round. Abrading the skin can spread the virus, vigorous rubbing, shaving, and nail biting can do the same.
 - Skin inflammations:
 - <u>Pityriasis rosea</u>: common, self-limiting, usually asymptomatic eruption with a distinct initial lesion. This "HERALD PATCH", which appears suddenly and without symptoms, usually is on the chest or back.
 - Secondary lesions appear 1-2 wks later while the herald patch remains.
 - The collarette scaling is another classic symptom of pityriasis rosea.
 - The lesions usually resolve suddenly in 4-12wks w/o scarring.
 - Outbreaks are known to occur in close quarters like military barracks or dormitories.
 - <u>Hives:</u> look at the location of the rash, the first step is to determine the need for epinephrine. Look for respiratory symptoms, SOB, hoarseness, look at location. If the rash is on the neck, face- admin epinephrine.
 - <u>Cholinergic urticaria:</u> hives or wheals that are pruritic and occur on the trunk and arms

following exercise, anxiety, elevated body temp. hot bath and showers.

• Hx taking about when the rash started is important for dx

- <u>Contact dermatitis:</u> poison ivy: a form of contact dermatitis, it is not contagious and it cannot be spread from one area of the body to another by touching it. Type of SPORE reaction.
 - Another type is Latex sensitivity
- <u>Keratosis pilaris:</u> mild pruritic and looks like GOOSEFLESH, the rash appears as small, pinpoint, follicular papules on a mildly erythematous base. It is a benign conditions that resolves by adulthood.
- Atopic Dermatitis: consider ALLERGY!!
 - Atopic triad: ASTHMA, ECZEMA, ALLERGIC RHINITIS
 - RAST may be done to ID the antigen-specific mast cell activation or to quantify levels of antigen-specific IgE. RAST is usually available to PCPs, where as scratch testing is usually done by allergists.
 - RAST results requires specialized knowledge, and should be used as general atopic screening tool.

Hair loss

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- <u>Alopecia areata:</u> systemic cause of alopecia, nonscarring hair loss of rapid onset, the pattern of which is most commonly sharply defined round or oval patches.
- <u>Trichotilomania:</u> non-scarring, non-systemic causes of alopecia include trauma, bacterial or local fungal infections, and radiation to the head.
- Minoxidil(Rogaine) vasodilator and may stimulate vertex hair growth.

Parasitic skin infections

- <u>Pediculosis:</u> (LICE!!) client education is important in the tx of pediculosis b/c pts should be informed that itching may cause for up to a week after successful tx b/c of the slow resolution of the inflammatory reaction caused by the lice infestation.
- Ear disorders
 - <u>Otitis externa:</u> classic sign of acute otitis externa is tenderness on traction of the pinna and/or pain on applying pressure over the tragus. There is typically an erythematous ear canal, and usually a hx of recent swimming.
 - Using ear drops made of a solution of equal parts alcohol and vinegar in ea. Ear after swimming is effective in drying the ear canal and maintaining an acidic environment, therefore preventing a favorable medium for the growth of bacteria, the cause of swimmer's ears.
 - <u>Acute otitis media:</u> ear infection that is dx by otoscopic examination. The tympanic membrane will appear red and bulging with or w/o visible effusion.
 - Light reflex is usually diminished or absent, and mobility id decreased NOT INCREASED!!
 - The external auditory canal is red and erythematous
 - Tx of choice: amoxicillin 80-90mg/kg/day in children in daycare
 - Note: it is important to note that if a child w/ O.M. with effusion has a change in hearing threshold greater than 25 dB and has notable speech and language delays, more aggressive tx is indicated. It is important that the provider evaluates the child's developmental milestone in speech and language. Abnormal findings warrant a referral.
 - <u>Meniere's disease:</u> the triad of symptoms associated with Meniere's disease: PROGRESSIVE HEARING LOSS, TINNITUS, AND VERTIGO.
 - Hearing loss
 - <u>Sensorineural loss:</u> come from exposure to loud noises, inner ear infections, tumors, congenital, and familial disorders, and aging.
 - Sensorineural loss comes from exposure to tumors such as acoustic neuromas, Meniere's disease, medications, trauma, and certain disease.
 - <u>Conductive hearing loss:</u> presbycusis- the conductive hearing loss- bone conduction is greater

than air conduction, so the patient will report the bone conduction sound longer than the air conduction.

- Serous otitis media can result in conductive hearing loss.
- The Weber test- a vibrating tuning fork is placed on the top of the head mid center from the patient's ears.
 - In the normal pt: the tuning fork sound is head equally loud on both ears
 - In abnormal pt: the tuning fork is heard LOUDER in the BAD ear.

Eye disorders

- <u>Conjunctivitis- viral or bacterial</u>: the causative organism of viral conjunctivitis ad adenovirus. It can be present w/ or w/o cold symptoms. Pts complain of itchy, watery, red eyes and may have clear to no discharge.
 - Preauricular lymph node swelling and tenderness is hallmark for viral conjunctivitis
 - Skin vesicles (if present) and corneal infection with a "dendrite" appearance are hallmark characteristics of HSV-1 or HSV-2 conjunctivitis.
 - Education: teach pts to put drops in and advise to avoid touching the tip of the bottle to any conjunctival or skin surface.
 - Women should be told to throw away all eye makeup products due to contamination and to start with new products when the infection clears.
 - Likewise, disposable contact lens wearers will need to discard the contacts, refrain from wearing any during tx, and start with a new pair when clinical symptoms have resolved.
 - Bacterial conjunctivitis is very contagious so the pt should stay home from work or school until 24 hours of antibiotic tx or as soon as clinical improvement (decreased redness and d/c) is noted.
- <u>Blepharitis:</u> inflammation around the eyelid margins, that is caused by staphylococcal injection at the lash base and dysfunctional Meibomian glands.
- <u>Subconjunctival hemorrhage</u>: bright red blood in a sharply defined area surrounded by normalappearing conjunctive indicates subconjunctival hemorrhage.
 - Risk factors: blood thinners, DM2, HTN, Valsalva type maneuvers.
 - The condition is self-limiting and resolves on its own
 - Patient w/ visual changes or with more extensive hemorrhage should be referred to an ophthalmologist or ER.
- <u>Corneal abrasion:</u> aka as an eye scratch- DX: fluorescein stain is done to detect abrasion or foreign body objects in the cornea.

ENT

- <u>Sinusitis:</u> invasive complications such as infection of an adjacent cranial structure (mastoiditis, meningitis, etc) require referral to a specialist.
 - With Ethmoid sinus problems: the pain is felt behind the eye and high on the nose
 - Maxillary sinus: the largest of the paranasal sinuses and is the most commonly affected sinus. There is usually pain and pressure over the cheek. The inability to transilluminate the cavity usually indicates a cavity filled with purulent material.
 - Discolored nasal drainage, as well as poor response to decongestants, may also indicate sinusitis.
 - If the patient has a URI for at least 7 days, the presence of 2 or more of the following signs/symptoms:
 - Colored nasal drainage
 - Poor response to decongestants
 - Facial or sinus pain (aggravated by postural change)
 - Headache
 - Viruses may produce all of the clinical manifestations described, however, patients who meet the 7-day criteria are more likely to have bacterial rather than a viral URI.
- Mononucleosis: fatigue, sore throat, low grade fever, nasal and throat mild erythema

 Edematous, enlarged tonsils bilaterally, with erythema of the pharyngeal wall and tonsillar exudates.

- Inflamed posterior cervical lymph nodes
- This presentation could be viral pharyngitis, however with posterior cervical lymphadenitis, you should suspect mononucleosis.
- <u>Epiglottitis:</u> a symptom cluster of severe throat pain with difficulty swallowing, copious oral secretions, respiratory difficulty, stridor, and fever but without pharyngeal erythema or cough is indicative of epiglottitis.
 - A pediatric pt w/ acute epiglottitis, a number of symptoms can indicate the airway obstruction is imminent: STRIDOR, RESTLESSNESS, NASAL FLARING, USE OF ACCESSORY MUSCLE OF RESPIRATION
 - <u>Tonsillitis:</u> tonsil grading is important: grade 3- indicates that the tonsils are touching the uvula.
 Tonsils are enlarged to 2,3, or 4 indicate acute infection.
- <u>Laryngitis</u>: most cases of acute laryngitis are due to viruses with H. influenza. Viral illnesses are best treated with supportive care. Antibiotics are ineffective and increase the risk of antibiotic resistance.
- <u>Peritonsillar Abscess</u>: peritonsillar cellulitis and abscess are acute pharyngeal infections most common among adolescents and young adults.
 - Infection is virtually always unilateral and is located btw the tonsil and the superior pharyngeal constriction muscle.
 - S/S: gradual onset of severe unilateral sore throat, odynophagia, fever, otalgia, and asymmetric cervical adenopathy. Trismus, similar to lock jaw or "hot potato" voice (speaking as if a hot object was in the mouth), is common. A toxic appearance (e.g. poor or absent eye contact, failure to recognize parents, irritability, inability to be consoled or distracted, drooling, severe halitosis, tonsillar erythema, and exudates can also be observed.
 - S/S cont: in pt's peritonsillar abscess, there is more of a discrete bulge, with deviation
 of the soft palate and uvula. Patients should be referred to the ED immediately as
 maintaining airway patency and preventing sepsis is of concern.
- <u>Candidiasis:</u> painless, white, slightly raises patches on the pt's mouth, AKA thrush
- <u>Oral Cancer:</u> 90% of oral cancers are squamous cell carcinoma (SCC) and is seen typically on the lip or lateral part of the toungue, usually as a lesion that is white, red, or mixed white and red.
 - Characterized by painless, firm lesions with indurated borders.
- <u>Rhinitis (Hay Fever):</u> allergic rhinitis results from immunoglobulin E(IgE)-mediated type I hypersensitivity to airborne irritants affecting eyes, nose, sinuses, throat, and bronchi.
 - The s/s are allergic rhinitis are similar to those of viral rhinitis but usually persist and are seasonal in nature. When assessing the nasal mucosa, you will observe that the turbinates are usually pale or violaceous because of venous engorgement.

GI DISORDERS

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- <u>Appendicitis:</u> constant periumbilical pain shifting to the right lower quadrant, vomiting following the pain, a small volume of diarrhea.
 - Fecalith: most common cause: stone made of feces typically found in the colon
 - No systemic symptoms: headaches/ malaise/ myalgia
 - A mild elevation of WBC count w/ early left shift, and WBCs or RBCs in the urine indications of appendicitis.
 - The WBC count becomes high only with gangrene or perforation of the appendix. The urine may have EBCs or RBCs if the bladder is irritated and ketonuria if there is prolonged vomiting.
 - Obturator sign: elicited when, with the patient's right hip and knee flexed. The examiner slowly rotates the right leg internally, which stretches the obturator muscle. Pain over the right lower quadrant is considered a positive sign.
- Inflammatory bowel disease: Chron disease shows transmural inflammation, granulomas, focal

involvement of the colon with some skipped areas, and sparing of the rectal mucosa, the inflammation extends deeper into the intestinal wall.

- *Chron's disease* can involve all or any layer of the bowel wall and any portion of the GI tract from the mouth to the anus.
- Any portion of the GI tract can be affected by 80% of pts have small bowel involvement.
- In advance disease, perianal lesions, fistulas, strictures, and obstructions are common in CD.
- Folic acid and serum levels of most vitamins, including A, B complex, C, and the fatsoluble vitamins, are decreased in CD as a result of malabsorption. Liver enzymes are increases.
- *Ulcerative colitis* is a disease only of the colon. While it is not the first tx of choise, total colectomy is tx option that can completely resolve this problem.
- In ulcerative colitis, the mucosal surface of the colon is inflamed. This ultimately results in friability, erosions, and bleeding. It most often occurs in the *rectosigmoid* areas but can involve the entire colon.
- In CD, patients with UC are more at risk for colon perforation and should be followed closely by surgeon.
- <u>GERD:</u> Symptoms occur at night w/ regurgitation, heartburn is classic for GERD (mild to severe). Dysphagia is frequently a prominent symptom of GERD.
 - It is usually associated with other symptoms, including regurgitation, water brash (reflex salivation) sour taste in the mouth in the morning, odynophagia, blenching, coughing, hoarseness, or wheezing, usually at night.
 - It a patient has been tx w/ diet modifications and 6wks of omeprazole w/o improvement of symptoms, the next step is an endoscopy.
 - A biopsy can be done and sent for H pylori at that time.
 - Diverticular disease has been shown to be significantly increased with a low fiber diet and diet that is high in fat and red meats. Obesity is associated with a higher risk for diverticular disease.
 - Clients w/ GERD should be instructed to avoid coffee, alcohol, chocolate, peppermint, and spicy foods. Eat smaller meals, smoking cessation, remain upright for 2 hours after meals, elevate the head of the 6-8 inches in blockers and refrain from eating for 3 hours before going to bed.
- <u>IBS:</u> Tx: anti-diarrheals (Lomotil), laxatives, antispasmodics (Bentyl), tricyclic antidepressants, SSRIs (prozac), and medications to increase the intestinal fluid secretion and improve fecal transit (Linzess) are all used to treat IBS.
- <u>Acute diverticulitis</u>: pts may have it with bleeding not associated with pain or discomfort. When diverticula become inflamed, there are usual s/s of infection: fever, chills, and tachycardia. Patients typically present with localized pain and tenderness in the LLQ of the abdomen with associated anorexia, nausea and vomiting.
 - CT scan w/ contrast may sometimes be done to r/o if the GN etiology such as ovarian cyst of tumor as well as bowel pathology such as abdominal abscess.
- <u>Gastroenteritis:</u> BOTULISM: GI illness associated with descending neurological s/s such as double vision after eating canned food.
 - *Traveler's diarrhea:* E coli is the most common pathogen responsible for traveler's diarrhea.
- <u>Peptic Ulcer Disease</u>: associated w/ H. pylori infection. TX: amoxicillin, clarithromycin, and omeprazole for 2 weeks.

Primary care basics:

- Data collection: subjective
- Documentation: OLDCART best reflects HPI
- APN business essentials:

- Determining the level of complexity of a visit: risk data and dx
- CPT codes: recognized universally and can be used to track healthcare data

- MEDICARE PART A: covers hospital services only.
- MEDICARE PART B: covers provider and outpatient services.
- Third party payers: the term indemnity insurer refers to an insurance that pays for the medical care of the insured but does not provide that care.

NR 511 Week 1 practice questions

- 1. Which of the following initiatives does not fall under the National Prevention Strategy?
 - Diabetes Management. Reference Page 29
 - Tobacco Free Living
 - Healthy Eating
 - Mental and Emotional Wellbeing
- 2. All of the following statements about the US Preventive Services Task Force (USPSTF) are true except?
 - All of the recommendations made by the USPSTF are strong recommendations. (The recommendations made by this organization are based on a grading scale. Some of the guidelines state that they don't have enough scientific data to support an informed recommendation.) Reference Page 31-32
 - This is a private sector group without government ties.
 - · This group makes recommendations about preventive medicine.
 - · All of the USPSTF recommendations are considered mandatory in primary care.
- 3. What type of reaction following an immunization is considered serious and requires reevaluation?
 - Temperature greater than 103°F. (High fever is a reason to reevaluate a patient following a vaccine. Reference Page 33
 - Fatigue
 - Temperature of 100.2°F.
 - Erythema and soreness at the injection site.

4. Herbert, a 69-year-old man, comes to your office complaining of nocturia. On questioning Herbert, you find that for the past 3 months he has been getting up at least 5 times a night to void. He came in to seek help today because of his wife's insistence that he be checked out. When you perform the digital rectal exam, you find that his prostate protrudes 3 to 4 cm into the rectum. What grade would you assign to Herbert's prostate enlargement?

- Grade 1 (Grade 1 enlargement is a protrusion of 1 to 2 cm.)
- Grade 2 (Grade 2 enlargement is a protrusion of 2 to 3 cm)
- Grade 3 (The degree of prostate enlargement is based on the amount of projection of the prostate into the rectum. The normal prostate protrudes less than 1 cm into the rectum. A grade 3 enlargement is 3 to 4 cm. into the rectum) Reference Page 748
- Grade 4 (Grade 4 enlargement is a protrusion of greater than 4 cm)

5. Which of the following individuals should get the shingles (herpes zoster) vaccine?

- Jerry, who has a mild upper respiratory tract infection and is allergic to neomycin (Allergy to neomycin is a contraindication to receiving the shingles vaccine)
- Tim, who has been on prolonged use of high-dose steroids for his chronic obstructive pulmonary disease (COPD). (Prolonged use of high-dose steroids is a contraindication to receiving the shingles vaccine)
- Joan, whose husband recently had shingles and who is trying to get pregnant (Women should not get pregnant until 4 weeks after receiving the vaccination)
- Joe. who has a stressful iob (Joe, who has a stressful job, is a candidate for the shingles (herpes zoster) vaccine) Reference page 134

6. As a primary care provider, which of the following topics is not typically important for adults aged 20 to 40?

- Focusing on increasing lifespan. (This is typically important to patients greater than 65 years old)
- · Career development.
- Self-image.
- Family relationships.
- 7. Which of the following statements defines health literacy?
 - The level to which a patient can understand, gain access to, and make proper medical decisions.
 - The ability of a patient to read health pamphlets.
 - The extent to which a patient can travel to see a medical provider.

The ability of a patient to write in the language of the health practitioner.

8. Between ages 7 and 18, both boys and girls are immunized against the following diseases:

- Tetanus, diphtheria, pertussis, meningitis, and human papillomavirus.
- Tetanus, diphtheria, pertussis, and rotavirus. (The rotavirus vaccine is given prior to age 7)
- Tetanus, diphtheria, pertussis, meningitis, human papillomavirus, and hepatitis A. (The hepatitis A vaccine is given prior to age 7)
- Tetanus, diphtheria, pertussis, meningitis, human papillomavirus, and hepatitis C. (There is no known vaccine for Hep C yet)

9. The OLD CARTS (onset, location, duration, character, aggravating/alleviating factors, radiation, timing, severity) mnemonic is best used in which part of your chart note?

- History of present illness (The OLD CARTS mnemonic is best used to describe the patient's symptoms in the history of present illness)
- Plan.
- Diagnosis.
- Physical exam.

10. Eileen, a 42-year-old woman, comes to your office with a chief complaint of fatigue, weight loss, and blurred vision. Eileen has a past medical history that is negative for any chronic medical problems. You obtain a fasting chemistry panel, lipid profile, complete blood count (CBC), and hemoglobin A1c (HbA_{1c}). The results of the blood work show Eileen's blood sugar elevated at 356 mg/dL, total cholesterol elevated at 255, high-density lipoprotein (HDL) cholesterol low at 28, low-density lipoprotein (LDL) cholesterol elevated at 167, triglycerides 333, and HbA_{1c} 12. On questioning Eileen further, you discover that both her grandmothers had adult-onset diabetes mellitus. You diagnose type 2 diabetes mellitus. Your treatment plan should include a cholesterol-lowering agent, an agent that lowers blood sugar, and which other class of medication?

Angiotensin-converting enzyme (ACE) inhibitor (

Studies have shown the use of ACE inhibitors in clients with diabetes, with or without hypertension, has slowed the progression of nephropathy. You must monitor the client's creatinine and potassium levels routinely. If the client's renal function does decrease, elevated potassium levels may occur. Some clinicians disagree on this approach and recommend waiting until microalbuminuria is present before initiating an ACE inhibitor. Other clinicians feel that her A1C indicates that she has been a diabetic for probably 10 years and would benefit from this approach)

- · Diuretic.
- Weight loss medication (Diet and weight loss are fundamental components of diabetes management)
- Beta blocker.

11. Margaret, age 29, is of medium build and 5 ft 4 in tall. You estimate that she should weigh about:

- · 105 lb.
- 110 lb.
- 120 lb (To estimate a client's ideal weight, use the following formula: For women older than age 25, allow 100 lb for the first 5 ft, then add 5 lb for each inch thereafter. For men, allow 106 lb for the first 5 ft, then add 6 lb for each inch thereafter. Multiply the number by 110% for a client with a large frame and 90% for a client with a small frame)
 - 130 lb.

12. Susie, age 5, comes to the clinic for a well-child visit. She has not been in since she was 2. Her immunizations are up to date. What immunizations would you give her today?

- None; wait until she is 6 years old to give her her booster shots (Susie is due for diphtheria, tetanus, and pertussis (DTaP); inactivated polio vaccine (IPV); and measles, mumps, and rubella (MMR) between the ages of 4 and 6. There is no need to wait until she is 6 years old)
- Diphtheria, tetanus, and pertussis (DTaP); *Haemophilus influenzae* type B (Hib); and measles, mumps, and rubella (MMR) (
- Susie is due for inactivated polio vaccine (IPV), in addition to DTaP and MMR. She is not due for Hib)
 Diphtheria, tetanus, and pertussis (DTaP) and inactivated polio vaccine (IPV) (Susie is due for measles, mumps, and rubella (MMR), in addition to DTaP and IPV)

Diphtheria, tetanus, and pertussis (DTaP): inactivated polio vaccine (IPV): and measles, mumps, and rubella (MMR) (Because Susie has not been in for several years, one cannot assume she will come in next year to get

the immunizations that are due between the ages of 4 and 6; therefore, this opportunity to give her needed immunizations cannot be missed. Between the ages of 4 and 6, a child is due for DTaP, IPV, and MMR, if all other immunizations are up to date)

13. Mimi, age 52, asks why she should perform a monthly breast self-examination (BSE) when she has her mammograms on schedule. You respond:

- "If you are faithful about your annual exams and mammograms, that is enough." (All women older than age 20 should examine their breasts monthly)
- "More breast abnormalities are picked up by mammograms than by clinical exams or BSE." (More than 90% of all breast abnormalities are first detected by self-examination_
- "More than 90% of all breast abnormalities are first detected by self-examination." (More than 90% of all breast abnormalities are first detected by self-examination. All women older than age 20 should examine their breasts monthly, a week after their period. After menopause, women should examine their breasts at the same time each month. There is some controversy. Most women perform BSE incorrectly, thus making the significance of a positive finding questionable. Breastcancer.org recommends a BSE be performed as a mammogram may miss a tumor)
 - "Self-examinations need to be performed only every other month." (All women older than age 20 should examine their breasts monthly)

14. Marian's husband, Stu, age 72, has temporal arteritis. She tells you that his physician wants to perform a biopsy of the temporal artery. She asks if there is a less invasive diagnostic test. What test do you tell her is less invasive?

- Computed tomography (CT) scan (A CT scan and magnetic resonance imaging (MRI) are done to detect neurological damage from hemorrhage, tumor, cyst, edema, or myocardial infarction. These tests may also identify displacement of the brain structures by expanding lesions. However, not all lesions can be detected by CT scan or MRI)
- Magnetic resonance imaging (MRI) (A computed tomography (CT) scan and MRI are done to detect neurological damage from hemorrhage, tumor, cyst, edema, or myocardial infarction. These tests may also identify displacement of the brain structures by expanding lesions. However, not all lesions can be detected by CT scan or MRI)
- Electroencephalogram (EEG) (An EEG is used to evaluate the electrical activity of the brain. It can identify seizure activity as well as certain infectious and metabolic conditions)
- Color duplex ultrasonography (A biopsy of the temporal artery is usually required to confirm the diagnosis of temporal arteritis. However, color duplex ultrasonography (a combination of ultrasonography and the flow velocity determinations of a Doppler system) has been shown to examine even small vessels, such as the superficial temporal artery, and show a halo around the inflamed arteries when temporal arteritis is present. Therefore, it is a much less invasive procedure than biopsy)

15. Which of the following refers to an aspect of a patient's health that can be changed or affected by a health intervention?

- Modifiable risk factor (A modifiable risk factor is an aspect of a patient's health that can be changed or affected by a health intervention)
- Nonmodifiable risk factor (A nonmodifiable risk factor is something in a patient's health profile that cannot be changed)
- Adjustable risk factor (This term does not exist in medicine)
- Changeable risk factor (This term does not exist in medicine)

16. An 81-year-old patient presents for a physical. She recently had a fall and now has problems walking up her stairs. The only restroom in the house is on the second floor. She also has a flight of stairs outside her house she has to navigate in order to reach street level, and this is difficult for her. Where does this information belong in your chart note?

- Functional health patterns (The patient is having trouble with her normal routine and daily life due to her recent fall, so this information belongs here)
- · Review of systems (This section is for patient symptoms, not functional home circumstances)
- Plan (While you can address these problems in the plan, this is not the place to make note of them)

Assessment (You can list her immobility as a diagnosis, but this area of the note would not be the place to note these findings)

17. Telehealth has shown a drastic increase in utilization by patients in which of the following fields of medicine?

- Psychology and psychiatry.
- Pediatrics.
- Primary care.
- Dermatology.

18. Mark, a 56-year-old man, comes to your practice seeking help quitting smoking. You prescribe varenicline (Chantix), a prescription medication, to aid with his attempt. What instructions do you give Mark regarding how to stop smoking with Chantix?

- Start the Chantix today according to the dosing schedule and then quit smoking after the 12-week medication schedule (Following the 12-week medication schedule after quitting minimizes the effect of nicotine withdrawal because Chantix works on the same receptors as nicotine)
- Start the Chantix today according to the dosing schedule and then pick a date to stop smoking about 7 days after starting Chantix (Chantix has been shown to be more effective in helping smokers quit than Zvban, another nonnicotine prescription medicine for smoking cessation. While Chantix contains no nicotine, it works on the same receptors as nicotine. It's the addiction to the nicotine inhaled from smoking that makes quitting so hard. The recommended dosing schedule for Chantix is as follows: day 1 to day 3, one 0.5-mg tablet per day; day 4 to day 7, one 0.5-mg tablet twice a day (once in the morning and once in the evening); day 8 to the end of treatment, one 1-mg tablet twice per day (once in the morning and once in the evening). Chantix should be taken with a full glass of water after eating. The client should choose a quit date to stop smoking should cease on the quit day, and Chantix should be continued for up to 12 weeks. If the client has not completely quit smoking by 12 weeks, another 12 weeks may help the client stay cigarette-free. The most common side effect is nausea (30%), but this is usually not severe enough to make the client discontinue the medication)
- Pick a date to stop smoking and start Chantix that day according to the dosing schedule (Taking Chantix for 7 days before the quit date allows it to build up in the body)
- Start Chantix today, take it twice a day for 2 weeks, and then stop smoking (Chantix should be initiated with one tab once a day. It should be taken for 7 days prior to the quit date)

19. Joseph, a 55-year-old man with diabetes, is at your office for his diabetes follow-up. On examining his feet with monofilament, you discover that he has developed decreased sensation in both feet. There are no open areas or signs of infection on his feet. What health teaching should Joseph receive today regarding the care of his feet?

- "Wash your feet with cold water only." (Joseph should wash his feet with warm, soapy water)
- "See a podiatrist every two years, inspect your own feet monthly, and apply lotion to your feet daily." (Diabetic clients should see a podiatrist yearly)
- "Go to a spa and have a pedicure monthly." (Joseph should rely on licensed health professionals for the care of his feet)
- "See a podiatrist yearly; wash your feet daily with warm, soapy water and towel dry between the toes; inspect your feet daily for any lesions; and apply lotion to any dry areas." (The American Diabetes Association recommends careful inspection of a diabetic client's feet for corns, calluses, and open lesions to prevent further deterioration into diabetic foot ulcers. Joseph should wash his feet daily with warm, soapy water and then towel dry them, especially between the toes, to prevent fungal infections. Diabetic clients should see a podiatrist yearly. Encourage patients to use a mirror to inspect the bottom of their feet)

20. Marvin is a gay man who is ready to "come out." What is the last step in the process of coming out?

- Testing and exploration (Testing and exploration is the second of 4 steps)
- Identity acceptance (Identity acceptance is the third of 4 steps)
- Identity integration and self-disclosure (The last step in the process of a gav man or lesbian coming out is that of identity integration and self-disclosure. The process of discovering and revealing one's sexual orientation can occur at any age and is known as "coming out." Stage theories for coming out have been summarized as a 4-step process: (1) awareness of homosexual feelings, (2) testing and exploration, (3) identity acceptance, and (4) identity integration and self-disclosure. If the ultimate costs of self-disclosure are felt to be too high, an individual may become socially isolated or deny gay or lesbian identity)
 - Awareness of homosexual feelings (Awareness is the first of 4 steps)
- 21. A lab value that is commonly decreased in older adults is:

Creatinine clearance (The creatinine clearance value is commonly decreased in older adults because of impaired renal function)

- Serum cholesterol (this is typically increased in older adults)
- Serum triglycerides (This is typically increased in older adults)
- Blood urea nitrogen (This is typically increased in older adults)
- 22. Martha, age 82, has an asymptomatic carotid bruit on the left side. What do you recommend?
 - Acetylsalicylic acid, or aspirin (ASA), therapy (Starting an asymptomatic older woman on ASA therapy may produce more problems, such as skin bruising or gastrointestinal bleeding)
 - Coumadin therapy (There is insufficient data to support Coumadin therapy for clients with asymptomatic carotid bruits)
 - Surgery (There is insufficient data to support surgery for clients with asymptomatic carotid bruits)
 - No treatment at this time (Clients with asymptomatic carotid bruits have a 2% incidence of cerebrovascular accident (CVA), also known as stroke or brain attack, per year. Although acetylsalicylic acid, or aspirin (ASA), anticoagulants, and surgery are frequently ordered, there are not sufficient data to prove that these treatments reduce the risk of CVA in clients with asymptomatic carotid bruits. A carotid ultrasound would show the percentage of any blockage, but at age 82 with no symptoms, this is not necessary)

23. Which of the following is not a modifiable risk factor?

- Weight.
- · Stress level.
- Race.
- Physical activity level.

24. Which of the following is not one of the generalized patterns of nursing care included in the Circle of Caring model?

- Intelligence.
- · Patience.
- · Advocacy.
- · Courage.

25. Which of the following statements does not belong in the past medical history portion of your chart note?

- Your patient had lab work at their last appointment that was negative (This belongs in the history of present illness or diagnostic tests portion of your note)
- Your patient had a cholecystectomy 3 years prior
- Your patient's father passed away from lung cancer.
- Your patient has an allergy to penicillin.

26. You have a patient who presents with ankle pain. Which of the following facts or observations does not belong in the physical exam portion of your note?

- The patient's pain started after a fall off his skateboard (This belongs in the history of present illness)
- The patient has a normal pulse and normal sensation of the foot.
- The patient has edema in his ankle.
- The patient has limited motion of his ankle.

27. Harry is taking his entire family to Central America and is wondering about protection against bites from malariacausing mosquitoes. What advice do you give him?

- Use an insect repellent with diethyltoluamide (DEET) for the entire family, applying it sparingly to small children (DEET is not recommended for application to the hands or faces of young children)
- Make sure the family is in well-screened or indoor areas from dusk to dawn (This preventive measure is recommended in combination with an insect repellent)

Use an insect repellent with diethyltoluamide (DEET) for adults and permethrin for children, and stav inside from dusk to dawn (Insect repellents with high concentrations (greater than 35%) of DEET are effective in preventing mosquito bites; however, DEET is not recommended for application to the hands or faces of young children. Permethrin is effective as a scabicide (at 5%) and as a pediculicide (at 1%). It is very effective at a