

Name _____

Student Number _____

3. How frequently should a patient who needs antibiotic prophylaxis be seen for dental procedures?

- a) Alternate days
- b) One to two weeks
- c) Frequency does not matter

4. Premature loss of deciduous teeth with early eruption of permanent teeth is associated with

- a) Hypothyroidism
- b) Hyperthyroidism
- c) Addison's disease
- d) Hyperparathyroidism

5. A patient with a 5mm vertical overlap presents with 36mm of interincisal opening. What best describes this patient's opening:

$$36 + 5 = 41$$

normal = 40-60mm

- a) Patient is within the lower range of normal opening.
- b) Abnormally low/restricted opening.
- c) Patient is hypermobile (opens beyond normal range).
- d) Patient has restricted opening probably due to a disc problem within the joint.

6. Patient B reports to you that her jaw has been popping and getting sticky on the right side, and this morning she woke up and has a limited ability to open her mouth. Which of the following would you expect to find upon examining her mandibular path on opening:

- a) Patient's mandible would deflect to the right. — ant disc w/ reduction
- b) Patient's mandible would deviate to the right. — disappears when open
- c) Patient's mandible would deflect to the left. — becomes greater when open
- d) Patient's mandible would deviate to the left.

7. An articular disc displacement with reduction of the temporomandibular joint creates what clinically:

- a) Locking
- b) Open dislocation
- c) Pain {always}
- d) Clicking
- e) Inability to open

8. Patients who have a clicking TMJ without pain:

- a) Do not exist
- b) Exist and need to be treated
- c) Exist and do not require treatment — 40% of popn.
- d) Should be referred for surgery
- e) Are called "closed-locked" patients

9. What is believed to be happening in a closed-lock scenario: — Disc Displacement w/o Reduction

- a) The patient has opened and the condyles have moved beyond the articular eminence
- b) The articular disc is displaced posteriorly and does not allow the patient to close fully
- c) The articular disc is displaced anteriorly and is recaptured during opening resulting in a click and then full opening w/ reduction
- d) The articular disc is disintegrating due to arthritis
- e) The articular disc is anteriorly displaced and the condyle is not allowed to fully translate down the articular eminence and opening is limited

8. *multiple gravel-like sounds (grating)*
Crepitation is indicative of which of the following problems:

- a) Ankylosis
- ☒ b) Arthritis
- c) Myofascial Pain
- d) Hypoplasia
- e) Spasm

9. Patient presents to your office with an acute decrease in range of motion following third molar extractions. The patient is opening 25mm without pain and forcing them further open creates pain but can be done and results in the patient opening normally. What would you your diagnosis be?

- ☒ a) Myospasm/ Trismus
- b) Articular disc displacement with reduction
- c) Articular disc displacement without reduction
- d) Myofascial Pain
- e) Myofibrotic Contracture

10. Myofascial Pain is characterized by:

- a) Crepitations
- b) Locking
- c) An unyielding firmness on passive stretch (hard-end feel)
- ☒ d) Trigger points
- e) Response to indomethacin

little or no pain unless involved = Trauma right to muscle forced to lengthen.

11. Aplasia, Hypoplasia, Hyperplasia, and Neoplasias are all which of the following:

- ☒ a) Articular disorders
- b) Arthritides
- c) Muscular disorders
- d) Occlusal disorders

12. The articular disc is normally positioned:

- a) Anterior to the condyle
- b) Posterior to the condyle
- ☒ c) Between the condyle and the articular surface of the eminence and fossae
- d) In the fossae and does not move

(Questions 13 – 15) A 34-yr old Caucasian female reported to Temple University School of Dentistry for comprehensive dental care. Her past medical history is positive for ventricular septal defect treated successfully at age 10. She reports that she is in her fourth month of pregnancy and is under regular Obstetrician's care. Her medications include folic acid with prenatal multivitamins and fluoride. Her chief complaint is bleeding upon brushing.

13. She needs premedication prior to invasive dental care.

- ☒ a) True
- b) False

14. The fluoride supplementation she is taking is expected to result in _____ caries in her child.

- a) Fewer.
- b) No change
- c) Increase
- ☒ d) Fluorosis

- P (15) It is safe to provide her with
- a) Emergency care
 - b) Routine care
 - c) Elective care
 - d) Preventative care
 - (e) All of the above

(Questions 16-18) The same lady returns to clinic in the 7th month with a complaint of painful swollen upper gums that bleed when she brushes. You see a soft erythematous 5 by 8 mm sessile nodule between #6 and 7. There was plaque accumulation on her upper anterior teeth.

- P (16) The most likely clinical diagnosis is a
- a) Papilloma
 - (b) Pyogenic granuloma
 - c) Neurofibroma
 - d) Fibroma

- P (17) Nitrous oxide can be administered to control her anxiety.
- (a) True
 - (b) False
- ?

- P (18) For pain control following surgical excision use
- a) Aspirin
 - (b) Acetaminophen (Tylenol)
 - c) Acetaminophen and codeine (Tylenol #3 with codeine)
 - d) Aspirin and oxycodone HCL (Percodan)

(Questions 19-21) Ms Davis, a nurse at Temple Hospital, reports to admissions clinic for comprehensive care. Her past medical history is non-contributory and she does not smoke or drink. She has no known drug allergies. You performed an oral exam and took alginate impressions for study models. She calls later in the morning complaining of red itchy blotches on the skin around her mouth and a swollen lower lip. When you question her, she reports no difficulty in breathing or tightening of her throat.

- P (19) The hypersensitivity reaction is most likely
- (a) Type I
 - b) Type II
 - c) Type III
 - d) Type IV

- A (20) Appropriate initial treatment for this level of allergic reaction is
- (a) 50 mg of diphenhydramine (Benadryl) p.o. qid
 - b) 0.5 ml of 1:1000 epinephrine IM
 - c) 100 mg of prednisone orally

- A (21) Possible allergens are
- a) Alginate
 - (b) Latex
 - c) Both
 - d) Neither

22. The mediating antibody in a Type I reaction is

- a) IgG
- b) IgM
- c) IgE
- d) IgD

type 1 T cells

23. Response time for Type IV reaction

- a) 30 minutes
- b) 3-8 hours
- c) 24-48 hours
- d) Does not matter

under 24 hrs is the

24. For which of the following conditions does the AHA recommend antibiotic prophylaxis for the prevention of endocarditis?

1. Prosthetic heart valves
2. Mitral valve prolapse with regurgitation
3. Pace makers
4. Atherosclerotic plaques
5. Pregnancy

- a) 1, 2
- b) 1, 2, 3
- c) 1, 2, 4
- d) 2, 3, 5
- e) All of the above

different

25. International normalized ratio (INR) is one of the laboratory tests used to evaluate

- a) Liver metabolism
- b) Coagulation status
- c) Cardiac efficiency
- d) Insulin levels
- e) Degree of atrophy

26. In order to perform extractions in a patient with chronic leukemia, their _____ counts should be at least 50,000/mm³

- a) Red blood cell
- b) White blood cell
- c) Monocyte
- d) Platelet
- e) Fibroblast

27. Patients with migraine:

- a) Experience short attacks that are relieved by indomethacin
- b) Experience stereotypical attacks of sharp pain lasting seconds triggered by light touch
- c) Find comfort in exercising during an attack
- d) Are almost always heavy smokers and have a history of alcohol consumption
- e) None of the above

- CPH, EPH, HC

- Cluster

28. Vaccines are currently available for hepatitis A and hepatitis B, but not for hepatitis C.

- a) True
- b) False

29. Approximately what percentage of the population has chronic daily headache (CDH)?

- a) 8%
- b) 20%
- c) 50%
- ☒ d) 4%
- e) 15%

30. Which of the following are classified under chronic daily headache:

- 1. Cluster headache ☒
- 2. Hemicrania Continua (HC) ☒
- 3. Temporomandibular Disorder (TMD) ☒
- 4. Chronic Migraine (CM) ☒
- 5. Chronic Tension-type Headache (CTTH) ☒
- 6. Trigeminal Neuralgia (TN) ☒
- 7. New Daily Persistent Headache (NDPH) ☒

- a) 1, 2, 3, 4
- b) 2, 3, 4, 5
- c) 2, 5, 6, 7
- ☒ d) 2, 4, 5, 7
- e) 1, 3, 6, 7

31. Which of the following symptoms describe migraine?

- 1. 4-72 hours in duration ☒
- 2. Mild to moderate in severity ☒
- 3. Moderate to severe in severity ☒
- 4. Unilateral but may be bilateral ☒
- 5. Always bilateral ☒
- 6. Pressure, band-like pain ☒
- 7. Throbbing ☒

- a) 1, 2, 4, 7
- ☒ b) 1, 3, 4, 7
- c) 1, 3, 5, 6
- d) 1, 3, 4, 6
- e) 1, 2, 5, 7

32. All of the following are true regarding tension-type headache except for:

- a) Attacks typically are bilateral ☒
- ☒ b) Nausea is associated with an attack ☒ - No vomiting
- c) Severity is mild to moderate ☒
- d) Attacks may last anywhere from 3 minutes to 7 days ☒
- e) Either photophobia or phonophobia may be present or both absent ☒

33. Which of the chronic daily headache disorders responds to indomethacin?

- a) Chronic Migraine (Transformed Migraine) ☒
- b) New Daily Persistent Headache ☒
- ☒ c) Hemicrania Continua ☒
- d) SUNCT ☒
- e) Chronic Tension-type Headache ☒

CCNH

CM ET CT CM HC

CT TH Cluster CDH EDH SUNCT HC

- +/- + + - +

CPH, EPH. - H

34. Which best describes the "refractory period" of trigeminal neuralgia?

- a) The remission period where the disorder is not present can last months to years
- b) The period of time it takes for the pain to appear after stimulating a trigger zone
- ☒ c) The period of time directly after an attack during which another attack cannot be triggered
- d) The period of time it takes for the disorder to become less responsive to medications
- e) The period of time it takes these patients to be correctly diagnosed

35. All of the following are true regarding Cluster headache except:

- ☒ a) The pain is mostly unilateral periorbital and temporal in location
- ☒ b) The pain is extremely severe and responds completely to indomethacin
- c) During a cluster attack patients are restless and move about the room
- d) The pain of cluster typically wakens the patient from sleep but can occur during the day as well
- e) Patients with cluster headache usually have a social history of heavy smoking and excessive alcohol intake

36. Chronic Paroxysmal Hemicrania is similar to Cluster headache in what way?

- ☒ a) Both affect women greater than men
- b) Both respond to indomethacin
- c) Both last for no more than 45 minutes
- ☒ d) Both are unilateral stabbing boring pain located around the eye and in the temporal area

37. All of the following are true regarding SUNCT except:

- a) It is refractory to treatment. ✓
- b) An MRI is needed to rule out secondary causes. ✓
- ☒ c) Mostly affects men ✓
- ☒ d) Attacks last longer than 250 seconds ✓

38. What best describes why Cluster headaches got their name?

- ☒ a) The headache occurs as rapid severe attacks called clusters
- ☒ b) The headache occurs in the same community or geographical area called clusters
- ☒ c) The near daily attacks occur in distinct clusters possibly 1-2 times per year for a few months at a time ✓
- ☒ d) Because there is one continuous attack that lasts for months at a time and then reoccurs on a seasonal basis ✓

39. Which of the following are aborted by oxygen?

- a) Trigeminal neuralgia
- b) Hemicrania continua
- c) SUNCT
- ☒ d) Cluster headache ✓
- e) Tension-type headache

Cluster SUNCT
male

40. Mrs. B presents to your office for a new patient evaluation. When you inserted the mirror and retracted the cheek, Mrs. B suddenly writhes in pain, clutching her right face and grimacing. You wipe the sweat from your brow, and within 10 seconds she reassures you everything is all right, "that just happens sometimes". Which of the following conditions does Mrs. B present with?

- a) Atypical Facial Pain
- b) Glossopharyngeal Neuralgia
- ☒ c) Trigeminal Neuralgia
- d) Cluster Headaches

41. List the following disorders from shortest attack duration to the longest:

- 1. Migraine *4-72 hrs*
- 2. Trigeminal Neuralgia *15-2 min*
- 3. Cluster Headache *15-180 min*
- 4. Chronic Paroxysmal Hemicrania *2-45 min*
- 5. SUNCT *5-250 sec*

- ☒ a) 1, 5, 2, 3, 4
- b) 5, 2, 3, 4, 1
- c) 2, 5, 3, 4, 1
- d) 2, 5, 4, 1, 3
- ☒ e) 2, 5, 4, 3, 1

42. Patients having *temporal arteritis* need to be diagnosed and treated in a timely fashion- how are they diagnosed and what could happen if not treated:

- a) Diagnosed from patient history; may lose vision.
- b) Diagnosed from sedimentation rate; may have ischemia of temporalis muscle.
- c) Diagnosed from history and biopsy; may have ischemia of the temporalis muscle.
- ☒ d) Diagnosed from history and biopsy; may lose vision.

43. Mrs. F presents in your chair with a recurring, throbbing toothache in #8. She reports this tooth is so painful that she is nauseated. She has had the tooth evaluated several times. Finally, an endodontist treated the tooth with a root canal and that helped for a period of time, but now the pain has returned. You examine the tooth and all seems normal and the radiograph shows a well-filled root canal. Percussion increases the pain ever so slightly. She is sitting in the chair wearing sunglasses and demanding treatment. You suspect Mrs. F is having:

- a) Cluster Headache
- ☒ b) Migraine Headache
- ☒ c) Atypical Facial Pain
- d) Trigeminal Neuralgia

44. A patient presents with very short severe electrical attacks of pain, which are located in or around their ear. The patient is in such pain it is almost impossible to discern where the pain is located or what might be triggering the pain. All of the following would included on your differential diagnosis except for:

- ☒ a) Trigeminal Neuralgia
- ☒ b) SUNCT
- c) Glossopharyngeal Neuralgia
- d) Nervus Intermedius (Geniculate Neuralgia)

45. Patient presents after falling on the right side of his face 2 years ago. No fractures were detected at the time of the accident. The patient reports that the impact was directly on the infraorbital rim on the right side. Shortly after the incident the patient reported having less sensation in the V2 distribution on the right side which resolved and has a deep burning sensation under the right eye ever since. Which of the following best fits as a diagnosis for this individual?

- a) Anesthesia Dolorosa
- b) Trigeminal neuralgia
- c) Myofascial Pain
- ☒ d) Traumatic Neuroma
- e) Atypical Odontalgia

46. Patient with trigeminal neuralgia sees an oral surgeon who performs a radiofrequency lysis of the left mandibular nerve. After the procedure the trigeminal neuralgia pain has stopped; however, now the patient has a continuous burning pain with electrical shocks in the V3 distribution and reports feeling as if the area were numb at the same time. Patient has had this same pain for the past 2 years after the surgery was completed. What would you list as your diagnosis for this patient at this time?

- a) Trigeminal Neuralgia
- ☒ b) Atypical Facial Pain
- c) Anesthesia Dolorosa
- d) Neuritis
- e) Burning Mouth Syndrome

47. Avoid excessive use of barbiturates & narcotics in

- a) Primary thrombocytopenia
- b) Sickle cell anemia
- c) Anemia
- d) Hemophilia

48. Avoid use of aspirin in

- 1. G-6-PD deficiency
 - 2. Sickle cell anemia
 - 3. Anemia
 - 4. Hemophilia
 - 5. Neutropenia
- a) 1 only
 - b) 2, 3, 4, 5
 - c) 1, 4
 - d) 1, 2, 4
 - e) All of the above

49. Before beginning a procedure on a diabetic patient you should check that

- a) He has taken all his medications as scheduled except insulin.
- b) He has been "NPO" (nothing by mouth) for 12 hours.
- c) He has increased his fluid intake by drinking 4 glasses of water to avoid dehydration.
- d) He has taken his insulin and eaten his regular meals.

50. Mrs. Smith, your Type 1 diabetic patient is complaining that she feels weak and dizzy and has become irritable. You should
- Continue your planned treatment. Mrs. Smith is always complaining about something.
 - Ask Mrs. Smith to take her insulin, as her symptoms are due to hyperglycemia.
 - Give her some orange juice, as her symptoms are due to hypoglycemia
 - Dismiss Mrs. Smith immediately and send a consult to her physician.
 - Call 911 after administering 0.5 ml 1:1000 epinephrine.
51. Your patient is in the second trimester of pregnancy and reports that last week her physician told her that she heard a heart murmur, but an echocardiogram found no valvular pathology. She also reports allergy to penicillin (hives and "tightening" of throat).
- Give 2gms amoxicillin 1 hour prior to invasive dental care
 - Give 600mg clindamycin 1 hour prior to invasive dental care
 - Listen to the murmur yourself and decide whether or not to give antibiotic prophylaxis
 - ☒ No prophylaxis is required.
52. Which of the following drugs are safe for use during breast-feeding
1. Penicillin
 2. Erythromycin
 3. Tetracycline
 4. Aspirin
 5. Benzodiazepine
- a) 1, 2, 3, 4
b) 1, 2, 4, 5
c) 1, 2, 5
☒ d) 1, 2
e) 3, 4, 5
53. Supine hypotensive syndrome most often occurs in
- The first trimester
 - The second trimester
 - ☒ The third trimester
 - All the trimesters
54. A man with IBD presents with a smooth, depapillated tongue and complains of pain and burning. A complete blood count (CBC) finds macrocytic anemia. This may be due to
- Iron deficiency due to malabsorption
 - Vitamin B complex deficiencies due to malabsorption
 - Use of one "baby" aspirin daily as a blood thinner
 - Using a soft toothbrush to clean his tongue
55. Prolonged bleeding may be a problem in patients with cirrhosis of the liver because of decreased production of the Vitamin K related clotting factors.
- True
 - False

61. A 54-year-old woman presents to your office as a new patient for routine dental care. She has mild rheumatoid arthritis, mild osteoporosis, open-angle glaucoma and was recently diagnosed with mild Sjögren's syndrome. Her medications are generic ibuprofen, calcium, Prempro, multivitamins with Vitamin D, saline eye drops and another new eye drop for her glaucoma (she can't remember the name). She complains of dry eyes, a constant dry mouth and difficulty eating dry foods such as crackers without sipping water. Her dental exam finds multiple, small carious lesions on the roots of her teeth and on the worn occlusal surfaces of her lower anterior teeth. Her hygiene efforts appear to be good: there is little plaque and she brushes and flosses twice a day. To help with her dry mouth and to control her caries, which of the following should be recommended for her?

1. Increase her hygiene efforts from brushing and flossing twice a day to brushing and flossing after every meal and using a neutral sodium fluoride rinse twice a day
2. Chew sugarless gum or suck on sugarless mints
3. Sip water throughout the day
4. Use 5 mg of Salagen (pilocarpine HCL) tid

- a) 1, 3, 4
 b) 2, 3, 4
 c) 1, 2, 3
 d) All of the above

62. Mucositis during radiation therapy for head and neck cancers typically

- a) Starts at about 2000 cGy, is confined to tissue within the radiation fields, lessens after 4000 cGy and is healed by the end of treatment
- b) Starts at about 2000 cGy in the tissue within the radiation fields, spreads throughout the mouth and does not resolve until about 1 month post radiation
- c) Starts at about 2000 cGy, is confined to tissue within the radiation fields, and does not resolve until about 1 month post radiation

63. Complications that may occur during radiation therapy for head and neck cancer are:

- a) Mucositis
- b) Loss or change in taste
- c) Reactivation of latent herpes simplex infection
- d) Oral candidiasis
- e) All of the above

64. A 44-year-old man presents for dental care and you notice rampant caries and during your oral exam, the mouth mirror sticks to his buccal mucosa. He complains of a dry mouth. His medications are methadone, sertraline (Zoloft), vitamins, acetaminophen, and amitriptyline (Elavil) at bedtime. You suspect that his high caries rate may be due in part to

1. Salivary hypofunction from use of vitamins and acetaminophen
2. Salivary hypofunction from use of sertraline and methadone
3. Salivary hypofunction from use of acetaminophen and amitriptyline
4. General disinterest in oral hygiene

- a) 1, 3, 4
 b) 2, 3, 4
 c) 1, 2, 3
 d) All of the above

65. A 67-year-old man with a fifty-pack year history of cigarette smoking (he quit 1 year ago) and a past history of heavy alcohol use presents for a pre-radiation therapy dental screening. He was recently diagnosed with cancer and is due to start radiation therapy in four days. He has a complete upper denture and 7 lower teeth (#22-27 and #32). Numbers 22 through 27 are in good repair without decay or mobility, but have 1-3 mm of recession and occlusal wear with exposed dentin on both roots and occlusal surfaces. Number 32 is severely decayed. He brushes once a week when he thinks of it. You call the radiation oncologist and learn that he has a Stage I squamous cell carcinoma (1.5 cm, no regional lymph nodes, no metastases) of his right throat/base of tongue and will receive 6000 to 7000 cGy of radiation to the right neck, right parotid and posterior right mandible. The left parotid and anterior mandible will be spared. Which of the following best describes the patient's situation and an appropriate treatment plan?

- a) He is at low risk of osteonecrosis and at low risk of severe post-radiation salivary hypofunction. Therefore, despite his poor hygiene can probably maintain his mandibular teeth and in any event, will not need extractions prior to radiation therapy.
- b) He is at high risk of osteonecrosis of the mandible and of severe post-radiation salivary hypofunction. With his poor hygiene, he must have all of his teeth extracted with primary closure at least 10 days before radiation therapy begins.
- c) He is at high risk of osteonecrosis of his entire right mandible and teeth #25, 26, 27 and #32 must be extracted with primary closure at least 10 days before radiation therapy begins. However, he is at low risk of severe post-radiation salivary hypofunction and despite his poor hygiene can probably maintain his left mandibular teeth.
- d) He is at high risk of osteonecrosis in the area of #32, which must be extracted with primary closure at least 10 days before radiation therapy begins. However, he is at low risk of severe post-radiation salivary hypofunction and despite his poor hygiene can probably maintain his anterior mandibular teeth. *if the parotid will compensate.*
- ~~e) He is at high risk of osteonecrosis in the area of #32 and at high risk of severe post-radiation salivary hypofunction. With his poor hygiene, he is likely to eventually need extraction of all of his teeth, but only #32 must be extracted with primary closure at least 10 days before radiation therapy begins.~~

66. A 35-year-old epileptic patient who is currently controlled with carbamazepine (Tegretol) (he used to take phenytoin [Dilantin]) presents on a Monday complaining of a toothache in his lower left jaw that has kept him from sleeping well for 2 days. You notice that he has gingival hyperplasia, poor oral hygiene, and a severely decayed and abscessed #19 with buccal swelling that needs to be extracted. He reports an allergic reaction to penicillin (hives) and upset stomach from codeine. Which of the following is true?

- a) The stress and lack of sleep because of his toothache could make him less likely to have a seizure so there should be no problem with extracting his tooth in the small, crowded operatory in the back where all the spare equipment is stashed.
- ⓑ) His gingival hyperplasia is likely the result of his use of phenytoin and poor hygiene.
- c) Post extraction, propoxyphene (Darvon) and erythromycin would be good choices for treatment of pain and infection.
- d) The best restoration for his missing #19 is a removable plastic denture rather than a fixed gold bridge.

END OF TEST