INBDE Sample Questions

ADA Department of Testing Services



Patient

Female, 10 years old

Chief Complaint

"My daughter is here for her regular check-up."

Background and/or Patient History

Current Findings

Which permanent tooth is LEAST likely to spontaneously erupt?



- A. 2
- B. 5
- C. 6
- D. 29

Key: C FK: 1, 4, 6 CC: 5, 1, 7



Patient

Male, 32 years old

Chief Complaint

"My gums hurt over my front tooth."

Background and/or Patient History

Recurrent gingival lesion Outbreaks last 7 to 10 days

Current Findings

Vesicular lesion between teeth 9 and 10

Which is the best treatment for the labial buccal mucosal lesions?



- A. Dexamethasone elixir
- B. Nystatin suspension
- C. Tetracycline oral rinse
- D. Valacyclovir (Valtrex®) tablets

Key: D

FK: 7, 6, 8

CC: 26, 18, 5, 3, 23



Patient

Male, 48 years old

Chief Complaint

"I've been in pain for two days and now my face is swollen."

Background and/or Patient History

Hypertension Type 2 diabetes Penicillin allergy

Current Findings

Facial edema Lymphadenopathy Extensive apical radiolucency associated with tooth 6

Temp: 100.3°F BP: 150/93

Blood glucose: 240 mg/dL

Where is the infection most likely located?

Patient Box associated with Sample Questions 3, 4, and 5.

- A. Buccal vestibule
- B. Canine space
- C. Nasal cavity
- D. Pterygomaxillary space

Key: B FK: 6, 2

CC: 1, 2, 18



Patient

Male, 48 years old

Chief Complaint

"I've been in pain for two days and now my face is swollen."

Background and/or Patient History

Hypertension Type 2 diabetes Penicillin allergy

Current Findings

Facial edema Lymphadenopathy Extensive apical radiolucency associated with tooth 6

Temp: 100.3°F BP: 150/93

Blood glucose: 240 mg/dL

Which is the most appropriate antimicrobial agent?

Patient Box associated with Sample Questions 3, 4, and 5.

- A. Amoxicillin and clavulanate (Augmentin®)
- B. Cephalexin (Keflex®)
- C. Clindamycin (Cleocin®)
- D. Metronidazole (Flagyl®)

Key: C FK: 8, 6, 7

CC: 26, 18



Patient

Male, 48 years old

Chief Complaint

"I've been in pain for two days and now my face is swollen,"

Five days after starting the antibiotic, the patient calls and says, "I have bad watery diarrhea, a high temperature, and stomach cramps."

Background and/or Patient History

Hypertension Type 2 diabetes Penicillin allergy

Current Findings

Facial edema Lymphadenopathy Extensive apical radiolucency associated with tooth 6

Temp: 100.3°F BP: 150/93

Blood glucose: 240 mg/dL

Which is the most appropriate next step?

Patient Box associated with Sample Questions 3, 4, and 5.

Also: Progressive item, paired with Sample Question 4

- A. Discontinue current antibiotic and refer to physician.
- B. Discontinue current antibiotic and substitute with azithromycin (Z-Pak®).
- C. Recommend loperamide (Imodium®).
- D. Recommend probiotics.

Key: A FK: 6, 8

CC: 26, 27, 18, 42



Patient

Male, 5 years old

Chief Complaint

Parent: "We're here for my son's follow-up exam."

Background and/or Patient History

First dental examination two weeks ago

Cooperation assessment: good Restorable caries on one or more primary molars in every quadrant.

Current Findings

After demonstration during the first restorative appointment, which is the next management technique?

- A. Distraction
- B. Explanation
- C. Rationalization
- D. Sedation

Key: A FK: 9

CC: 1, 15, 14



Patient

Female, 12 years old

Chief Complaint

"My mouth hurts."

Background and/or Patient History

Four first premolars extracted 24 hours ago

Current Findings

No swelling

Post-treatment discomfort is best managed with

- A. acetaminophen (Tylenol®).
- B. codeine.
- C. ibuprofen (Advil®).
- D. tramadol (Ultram®).

Key: C FK: 8

CC: 26, 19, 32



Patient

Male, 64 years old

Chief Complaint

"My tooth has turned dark grey."

Background and/or Patient History

Prosthetic heart valve

Medications:

warfarin (Coumadin®)

Current Findings

Necrotic tooth 24 Tooth 24 not responsive to cold No swelling present International normalized ratio (INR): 3 Before extracting tooth 24, which is the best option?

- A. Amoxicillin 2 grams should be taken 30 to 60 minutes before procedure.
- B. Clarithromycin (Biaxin®) 500 milligrams should be taken 30 to 60 minutes before procedure.
- C. Warfarin (Coumadin®) should be discontinued the morning before procedure.
- D. No antibiotic administration is required.

Key: A FK: 8, 6

CC: 26, 32



Patient

Male, 35 years old

Chief Complaint

"I've had a metallic taste in my mouth for the past few days."

Background and/or Patient History

Good oral hygiene Good overall health Several implants Several restorations recently completed:

- Gold crown, tooth 2
- Mesial-occlusal-distal (MOD) amalgam, tooth 3
- · Zirconia crown, tooth 4
- Porcelain-fused-to-metal (PFM) bridge, teeth 29 to 31

Current Findings

Which is the most likely cause of the chief complaint?

- A. Gold interfacing with amalgam
- B. PFM bridge
- C. Titanium implants
- D. Zirconia interfacing with amalgam

Key: A FK: 3

CC: 1, 2, 6



Patient

Male, 14 years old

Chief Complaint

"I can't seem to get rid of the sores at the corners of my mouth."

Background and/or Patient History

Painful lesion Lesion is recurrent, never goes away entirely

Current Findings

Which is the most appropriate treatment?



- A. Acyclovir (Zovirax®) cream
- B. Amantadine (Symmetrel®)
- C. Amlexanox (Aphthasol®)
- D. Nystatin and triamcinolone (Mycolog®-II) cream

Key: D FK: 8, 7 CC: 26, 5



Patient

Female, 75 years old

Chief Complaint

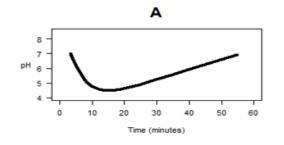
"My gums hurt over my front tooth."

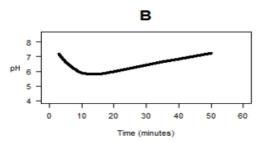
Background and/or Patient History

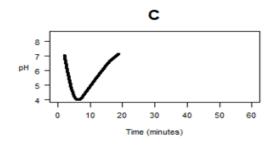
Oropharyngeal cancer treated by radiation

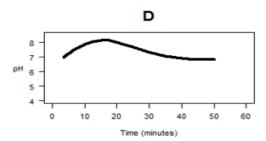
Current Findings

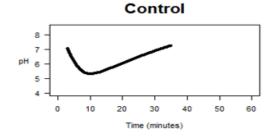
Which graph best shows the likely plaque pH response after drinking a sugary beverage?











Key: A FK: 10, 2 CC: 21, 5



Patient

Male, 60 years old

Chief Complaint

"My gums bleed easily."

Background and/or Patient History

Paroxysmal supraventricular tachycardia Pulmonary embolism Type 2 diabetes Hypertension Hyperlipidemia

Medications:

metformin (Glucophage®) atorvastatin (Lipitor®) warfarin (Coumadin®) aspirin 81 mg daily

Current Findings

BP: 145/90 Diffuse gingival bleeding Which mechanism of action most likely explains the chief complaint?

Patient Box associated with Sample Questions 12 and 13.

- A. Antithrombin III inactivation
- B. Coagulation activation
- C. Thrombin inhibition
- D. Vitamin K antagonism

Key: D

FK: 6, 7, 8

CC: 1, 2, 6, 27



Patient

Male, 60 years old

Chief Complaint

"My gums bleed easily."

Background and/or Patient History

Paroxysmal supraventricular tachycardia Pulmonary embolism Type 2 diabetes Hypertension Hyperlipidemia

Medications:

metformin (Glucophage®) atorvastatin (Lipitor®) warfarin (Coumadin®) aspirin 81 mg daily

Current Findings

BP: 145/90

Diffuse gingival bleeding

Which laboratory result would provide a definitive diagnosis for the chief complaint?

Patient Box associated with Sample Questions 12 and 13.

- A. Bleeding time
- B. International normalized ratio
- C. Partial thromboplastin time
- D. Platelet count
- E. Serum vitamin K

Key: B

FK: 2, 8, 6

CC: 3, 6, 1, 7



Patient

Male, 9 years old

Chief Complaint

Parent: "My son was hit in the face with a baseball and he's bleeding and missing teeth!"

Background and/or Patient History

Type 1 diabetes

Current Findings

Which question is most important to ask the parent first?

Patient Box associated with Sample Questions 14, 15, 16, and 17.

- A. "Did the child lose consciousness?"
- B. "Do you have the teeth?"
- C. "When did the child last eat?"
- D. "When did the injury occur?"

Key: A FK: 9, 6

CC: 1, 18, 11



Patient

Male, 9 years old

Chief Complaint

Parent: "My son was hit in the face with a baseball and he's bleeding and missing teeth!"

Background and/or Patient History

Type 1 diabetes

Current Findings

Which screening radiograph would be most helpful in diagnosing a mandibular fracture?

> **Patient Box associated with Sample Questions** 14, 15, 16, and 17.

- A. Bitewing
- B. Lateral cephalogram
- C. Panoramic
- D. Periapical

Key: C FK: 3

CC: 10, 7



Patient

Male, 9 years old

Chief Complaint

Parent: "My son was hit in the face with a baseball and he's bleeding and missing teeth!"

Background and/or Patient History

Type 1 diabetes

Current Findings

Reimplantation is desired. What is the best way to protect permanent teeth after avulsion?

Patient Box associated with Sample Questions 14, 15, 16, and 17.

- A. Place back into the sockets
- B. Place under the tongue
- C. Put in a cup of milk
- D. Wrap in a wet napkin

Key: A FK: 6, 1

CC: 17, 18



Patient

Male, 9 years old

Chief Complaint

Parent: "My son was hit in the face with a baseball and he's bleeding and missing teeth!"

Background and/or Patient History

Type 1 diabetes

Current Findings

The fractured fragment of tooth 7 has not been found. What is the first step?

Patient Box associated with Sample Questions 14, 15, 16, and 17.

- A. Administer appropriate pulp therapy
- B. Ask the parent if there was a pre-existing fracture
- C. Evaluate pulpal status
- D. Radiographic image of lower lip

Key: B FK: 6, 1

CC: 3, 5, 11, 18



Patient

Male, 38 years old

Chief Complaint

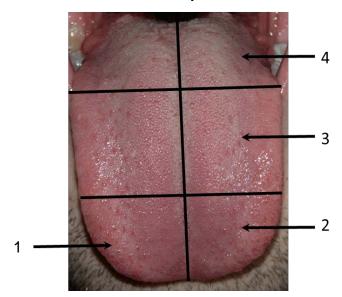
"I haven't been able to taste on the left side of my tongue for the past three days."

Background and/or Patient History

Left inferior alveolar nerve block during a prior dental treatment

Current Findings

Where would a loss of taste be expected?



- A. 1 and 2
- B. 2 and 3
- C. 3 and 4
- D. 2, 3, and 4

Key: B

FK: 6, 1, 2

CC: 2, 6, 27, 1



Patient

Male, 75 years old

Chief Complaint

"I'm here to have my filling done."

Background and/or Patient History

Atrial fibrillation

Medications:

dabigatran (Pradaxa®) metoprolol (Toprol®)

Current Findings

The procedure results in a carious exposure of the pulp. The patient chooses to have the tooth extracted. What is the next step at this appointment?

- A. Discontinue dabigatran (Pradaxa®) the morning of the appointment.
- B. Obtain an international normalized ratio (INR) level the morning of the procedure.
- C. Proceed without treatment modification.
- D. Use 2% lidocaine with 1:50,000 epinephrine.

Key: C FK: 6, 8

CC: 27, 32, 20



Patient

Male, 37 years old

Chief Complaint

"I have white stuff on my tongue."

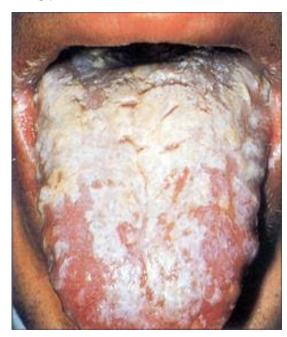
Background and/or Patient History

Recurrent low grade fever and fatigue. Patient periodically feels cold and a little ill.

Current Findings

White coating can be wiped off.

What is the etiology of this condition?



- A. Bacterial infection
- B. Fungal infection
- C. Viral infection
- D. Vitamin B₁₂ deficiency

Key: B FK: 6, 7 CC: 6, 18



A drug has a half-life of 4 hours. Upon discontinuing the drug

- A. 87% will be eliminated in 8 hours.
- B. 90% will be eliminated in 24 hours.
- C. 94% will be eliminated in 12 hours.
- D. 94% will be eliminated in 16 hours.

Key: D FK: 8 CC: 26



Patient

Male, 65 years old

Chief Complaint

"A year ago I lost the filling in my back tooth."

Background and/or Patient History

Smoker (cigarettes), 40 pack-year history

Dental phobia

Medications:

hydrochlorothiazide (Microzide®) rosuvastatin (Crestor®) aspirin 81 mg

Current Findings

BP: 190/100 Height: 6' 1" Weight: 325 lbs Physician referral is most urgent for the treatment of

- A. anxiety.
- B. hypertension.
- C. obesity.
- D. smoking.

Key: B FK: 6

CC: 8, 16, 52, 11



When making decisions about patient treatment, which type of study provides the strongest evidence?

- A. Case control
- B. Cohort
- C. Double-blind randomized
- D. Evidence summary
- E. Systematic review

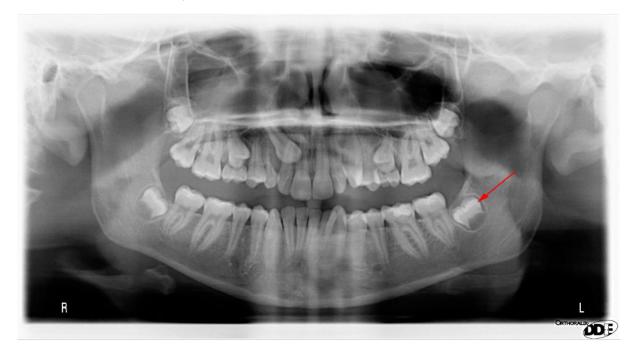
Key: E

FK: 10

CC: 41



Which tooth is indicated by the arrow?



A. 1

B. 2

C. 16

D. 17

Key: D FK: 1, 2

CC: 3, 1, 5



Patient

Male, 57 years old

Chief Complaint

"I need a check-up"

Background and/or Patient History

Current Findings

Noncavitated demineralized lesion on occlusal surface, tooth 13

Which is the most appropriate management?

- A. Amalgam restoration
- B. Monitor lesion at subsequent visits
- C. Resin restoration
- D. Sealant

Key: D FK: 6

CC: 5, 3



Patient

Female, 61 years old

Chief Complaint

"I didn't want to miss my appointment, but I don't feel good. I have a fever and a cough, and I can't catch my breath."

Background and/or Patient History

H3N2 strain influenza
Osteoarthritis
Dysplastic povus sync

Dysplastic nevus syndrome Fractured right ankle repaired with bone plates and screws, one year

Melanoma removed from left shoulder, three years ago

Medications:

acetaminophen (Tylenol®) meloxicam (Mobic®) tramadol (Ultram®)

Current Findings

Temp: 101.4°F

Which statement is correct regarding the prior skin tumor?

- A. The depth of invasion is not important in establishing a prognosis.
- B. It is formed by malignant Langerhans cells.
- C. It is often associated with chronic actinic damage.
- D. It often has well demarcated borders.

Key: C

FK: 6, 4

CC: 8



A patient has a maximum opening of 25 mm. Each of the following could be a contributing factor EXCEPT one. Which is the EXCEPTION?

- A. Condylar ankylosis
- B. Fatigue of the masseter muscle
- C. Hypertrophy of the coronoid process
- D. Pericoronitis

Key: B FK: 6, 1

CC: 5, 2



Patient

Male, 45 years old

Chief Complaint

"My teeth look bad and are loose. I also have a sore throat and I don't feel good."

Background and/or Patient History

Smoker (cigarettes), 12 pack-year history
Factory worker

Current Findings

Temp: 101°F
Malaise for 4 to 5 days
Bilateral tender anterior cervical lymph
nodes
Bilateral enlargement of tonsils

The dentist refers the patient to his physician for the complaint of a sore throat. The patient is given a prescription for amoxicillin (Amoxil®), which is taken by the patient for the next three days. The patient returns two weeks later with complaints of pain in multiple joints and an epidermal rash on his trunk area. What is the most likely cause of these new signs and symptoms?

- A. Allergic reaction to amoxicillin (Amoxil®)
- B. Bacterial endocarditis
- C. Erythema multiforme
- D. Rheumatic fever

Key: D FK: 6, 4

CC: 8, 27, 1



Patient

Male, 45 years old

Chief Complaint

"My teeth look bad and are loose. I also have a sore throat and I don't feel good."

Background and/or Patient History

Smoker (cigarettes), 12 pack-year history Factory worker

Current Findings

Temp: 101°F

Malaise for 4 to 5 days

Bilateral tender anterior cervical lymph

nodes

Bilateral enlargement of tonsils

Which is the most likely cause of the oropharyngeal signs and symptoms?

- A. Hand, foot, and mouth viral infection
- B. Mononucleosis
- C. Streptococcal pharyngitis
- D. Varicella zoster infection

Key: C FK: 6, 7

CC: 8, 5, 3, 1, 2



A patient with a 40 pack-year history of smoking cigarettes expresses the desire to quit smoking. Each of the following is appropriate EXCEPT one. Which is the EXCEPTION?

- A. Prescribe nicotine (NicoDerm-CQ®) patches
- B. Recommend hypnosis
- C. Recommend nicotine (Nicorette®) chewing gum
- D. Recommend the use of a smokeless tobacco

Key: D FK: 9, 8

CC: 9, 14, 52, 26



Patient

Male, 48 years old

Chief Complaint

"My jaw hurts when I chew, and I cannot open my mouth wide."

Background and/or Patient History

No history of medical problems or medications

Previous dental history: routine prophylaxis only

Recently assumed an executive position in a large company

Current Findings

Maximum opening is 20 mm Sensitivity to palpation of masseter, temporalis, and pterygoid muscles The initial treatment should include each of the following EXCEPT one. Which is the EXCEPTION?

- A. Bite plane splint therapy
- B. Diet modification
- C. Minor occlusal adjustment
- D. Prescription for a muscle relaxant

Key: C

FK: 6, 2, 1

CC: 1, 2, 3, 34, 35



Which is the greatest threat to pulp vitality during preparation of a tooth?

- A. Bacteria
- B. Desiccation
- C. Heat
- D. Pressure

Key: C FK: 2, 3

CC: 20, 30



Which base or liner may interfere with the polymerization of a resin composite restoration?

- A. Calcium hydroxide
- B. Copolymer
- C. Glass ionomer
- D. Zinc oxide eugenol

Key: D FK: 3

CC: 30, 21



Each of the following is true of taurodontism EXCEPT one. Which is the EXCEPTION?

- A. Larger pulp chamber due to occlusally displaced furcation
- B. Occurs in patients with amelogenesis imperfecta and Down syndrome
- C. Permanent and primary teeth may be affected
- D. Unusual root shape due to late invagination of Hertwig epithelial root sheath

Key: A

FK: 4, 2

CC: 1, 5



Patient

Male, 16 years old, accompanied by parent

Chief Complaint

"I am here for my cleaning."

Background and/or Patient History

Medications:

albuterol (Proventil®)

Current Findings

White plaque covering the areas of the posterior hard and soft palatal mucosa

Which is the most likely diagnosis?

- A. Candidiasis
- B. Herpangina
- C. Mononucleosis
- D. Streptococcal pharyngitis

Key: A FK: 2, 7

CC: 5, 6, 4, 1, 3



Patient

Female, 59 years old

Chief Complaint

"I have many missing teeth and several more are loose. My mouth is also dry."

Background and/or Patient History

Hypertension

Medications:

aspirin 81 mg hydrochlorothiazide/triamterene (Dyazide®)

Current Findings

Missing many teeth
Several remaining teeth exhibit class 1 to 2
mobility

Wants to save as many teeth as possible Intraoral examination reveals profound mucosal dryness

Manipulation of major salivary gland ducts fails to produce saliva

Management of the most common opportunistic infection in this case includes which drug?

- A. Carbamazepine (Tegretol®)
- B. Cephalexin (Keflex®)
- C. Clonazepam (Klonopin®)
- D. Clotrimazole (Mycelex®)

Key: D FK: 8

CC: 18, 26



Patient

Female, 25 years old

Chief Complaint

"My upper left back tooth has been sensitive to hot, cold and chewing. I woke up in pain last night."

Background and/or Patient History

Has not seen a dentist for five years Patient expresses a strong desire to maintain her teeth

Current Findings

Apical radiolucency tooth 15 No swelling

What is the most appropriate emergency treatment?

- A. Antibiotics and nonsteroidal anti-inflammatory drugs (NSAIDs)
- B. Occlusal adjustment and NSAIDs
- C. Pulpectomy and antibiotics
- D. Pulpectomy and NSAIDs

Key: D FK: 6, 8

CC: 1, 2, 28, 26



Patient

Male, 75 years old

Chief Complaint

"I have a painful burning sensation on my tongue and on the roof of my mouth."

Background and/or Patient History

Hepatitis C, diagnosed 20 years ago Gastroesophageal reflux disease (GERD) Surgery for benign prostatic hyperplasia two years ago

Replacement of left proximal thumb joint due to osteoarthritis, 1.5 years ago
Allergic to penicillin - urticaria

Medications:

allopurinol (Zyloprim®) esomeprazole (Nexium®) solifenacin (Vesicare®) trazodone (Desyrel®)

Smoker (cigarettes), 40 pack-year history

Current Findings

relief

Burning sensation involving dorsal tongue and palate for the past five years
Past treatment with nystatin has not resulted in

The patient's physician prescribes cephalexin (Keflex®) 2 gm, to be taken prior to the dental treatment. The patient presents to the dental office with a rash and itching on the chest, neck, and arms. Each of the following is an appropriate next step EXCEPT one. Which is the EXCEPTION?

- A. Administer diphenhydramine (Benadryl®) and monitor the patient
- B. Contact the patient's physician to discuss options for treating the patient
- C. Decrease the dose of cephalexin (Keflex®) to 1 gm prior to dental treatment
- D. Recommend clindamycin (Cleocin®) if an antibiotic is needed for future dental treatment

Key: C FK: 8, 5

CC: 1, 27, 2, 26, 53



Patient

Female, 45 years old

Chief Complaint

"I want to get my teeth checked."

Background and/or Patient History

New patient
Self-proclaimed dental phobia
History of infrequent dental care
Suffered traumatic dental treatment
experience as a child

Current Findings

Oral and radiographic examination reveal multiple caries

Which should be the first action for the dentist to take after the initial oral diagnosis and treatment plan discussion?

- A. Encourage the patient to discuss previous traumatic dental experiences.
- B. Refer the patient for behavioral therapy prior to initiating dental treatment.
- C. Schedule the patient for restorative procedures in one appointment.
- D. Schedule the patient for restorative procedures under conscious sedation.

Key: A FK: 9

CC: 14, 15, 1, 44, 42



Patient

Male, 1 year old, accompanied by mother

Chief Complaint

Mother: "My son fell and a baby tooth came out."

Background and/or Patient History

Has never been to a dentist Family members are patients of record

Current Findings

Tooth E has avulsed and is in a cup of milk

Which action should be performed by the dentist?

- A. Curette the socket and suture the site.
- B. Inspect the socket and reassure the mother and infant.
- C. Reimplant the tooth and splint to adjacent teeth.
- D. Reimplant the tooth but do not splint.

Key: B FK: 6, 9

CC: 11, 18, 1, 2



Patient

Female, 30 years old

Chief Complaint

"I want my teeth fixed before getting pregnant."

Background and/or Patient History

Duodenal ulcer

Medications:

antacid oral contraceptive

Extractions prior to orthodontic treatment

10 years since last dental visit

Current Findings

Missing and carious teeth
Gingival swelling and erythema
around tooth 17
Bilateral tenderness in muscles of
mastication

There are four posterior teeth present in the mandibular left quadrant. One tooth has five cusps, two teeth have four cusps, and another tooth has three cusps. Which tooth is missing?

- A. 18
- B. 19
- C. 20
- D. 21

Key: D FK: 1, 6 CC: 5, 1, 2



Patient

Male, 5 years old, accompanied by parents

Chief Complaint

Parents: "We are here for our son's first dental exam."

Background and/or Patient History Duchenne muscular dystrophy, an X-

linked recessive disorder, diagnosed three years ago. Difficulty swallowing Lives in area with fluoridated water. Parents assist with brushing teeth

Current Findings

twice daily.

Occlusal caries noted on tooth T Gingival swelling distal to tooth T

If the patient's father is unaffected and the mother is a carrier, what is the expected incidence of the patient's siblings NOT being phenotypically affected?

- A. 12.5%
- B. 25%
- C. 50%
- D. 75%
- E. 100%

Key: D FK: 4

CC: 1, 3, 8, 11, 14



The Occupational Safety and Health Administration (OSHA) bloodborne pathogen standard requires healthcare employers to do each of the following EXCEPT one. Which is the EXCEPTION?

- A. Establish an exposure control plan.
- B. Implement the use of standard precautions.
- C. Make hepatitis C vaccinations available.
- D. Provide personal protective equipment.

Key: C FK: 9

CC: 47, 51, 49

