LESSON ASSIGNMENT

LESSON 2
The Oral Examination in Preventive Dentistry.

LESSON OBJECTIVES
After completing this lesson, you should be able to:

2-1. Identify the roles of the dental specialist and the preventive dentistry specialist.

2-2. Identify basic information related to plaque, calculus, and stains.

SUGGESTION
After studying the assignment, complete the exercises at the end of this lesson. These exercises will help you to achieve the lesson objective.
LESSON 2
THE ORAL EXAMINATION IN PREVENTIVE DENTISTRY

Section I. THE ROLE OF THE DENTAL SPECIALIST AND THE PREVENTIVE DENTISTRY SPECIALIST

2-1. GENERAL

Preventive dentistry is, perhaps, the single most important aspect of dentistry. Preservation of the original structures of the oral cavity by preventing disease is far more effective than trying to fight dental disease once it has begun. The work of the dental specialist and the preventive dentistry specialist (PDS) is an integral part of any preventive dentistry program.

2-2. ROLE OF THE DENTAL SPECIALIST

a. The basic dental specialist (68E10), or dental assistant as they were formerly known, performs the following preventive dentistry tasks.

   (1) Conducts oral history interviews.

   (2) Instructs patients on basic oral hygiene care, to include brushing and flossing techniques.

   (3) Performs and records plaque and gingival bleeding indices, and reports to the dental officer any changes from normal appearance of oral tissue.

b. In general, the dental specialist is assigned duties (given responsibilities) affecting not only the oral health of individuals but also the oral health of the military community.

2-3. ROLE OF THE PREVENTIVE DENTISTRY SPECIALIST

a. The PDS has received specialized training beyond the 68E10 level and carries the X2 additional skill identifier (ASI). Under the supervision of a dental officer, the preventive dental specialist, working with individual patients, performs the following tasks.

   (1) Removes all tooth deposits both above and below the given tissue level.

   (2) Performs root planing and curettage.

   (3) Applies topical fluoride or other similar materials to the teeth.
(4) Instructs in preventive dentistry.

(5) Inserts and finishes both final and interim restorations.

(6) Applies pit and fissure sealants.

b. The PDS notifies the dental officer of conditions requiring further examination and treatment. In the military community, the PDS may have a major role in teaching prevention of oral disease. In both fields of endeavor, the PDS is the individual making direct contact with the public or the patient. His interest, attitude, and appearance, the manner in which he performs the required duties, and his enthusiasm and knowledge all will influence the acceptance of the PDS's professional efforts.

2-4. PATIENT MOTIVATION

Since human behavior is quite variable, there is no common motivational technique for every patient. This area is perhaps the most challenging and rewarding aspect of the practice of dentistry. Learning to be a good listener during your examination and oral interviews is essential to understand the patient's dental intelligence quotient, his priorities, and what his goals are concerning oral health. Learning these things about each individual gives a baseline from which to proceed. One must keep in mind that not all patients are as interested or motivated in oral health as those in the profession. Occasionally, one must accept the fact that some patients will never change their habits. However, one must not make the mistake of giving up too soon since humans tend to learn by repetition and conditioning. We can offer professional advice and guidance, but the patient must decide for himself how the advice will be used. The goal in a preventive dentistry education program is to convince the patient that new oral health habits, with the various associated behaviors, are beneficial.

2-5. PATIENT COMMUNICATION

There are many barriers to effective two-way communication with certain patients. Two of the most common are fear and inactivity.

a. Fear may be caused by a previously traumatic experience, information gained from others, or just fear of the unknown. Fear is generally not as critical a problem in preventive dentistry as it is in restorative or surgical procedures. Much of the patient's anxiety can be relieved by explaining what is going to happen and how it will be done. Most importantly, care about your patients. Patients can sense your concern, particularly younger children. It will make your job much easier and more enjoyable.

b. The second barrier, inactivity, can be eliminated by getting the patient involved in the education process. Let him demonstrate his brushing and flossing techniques, and encourage questions.
2-6. **APPROACHES TO EFFECTIVE PATIENT CARE**

Some useful suggestions for achieving behavioral change in patients include the following.

a. **Learn About Your Patient.** One complaint that many patients have is that they feel as if they are "just another body." In other words, the dentist and his staff are too impersonal. Nothing will ensure patient cooperation faster than showing some genuine concern and personal feeling for your patient.

b. **Establish the Patient's Dental Intelligence Quotient.** As discussed in the section on patient communication, it is important to know the patient's opinion of his oral health and his goals for restoring and/or maintaining his oral health. Before a patient can be motivated to use preventive dentistry techniques, he must first be aware that he has a problem and how you can help him solve it. Plaque control education without establishing a need is wasted effort.

c. **Set Short-Range Goals for Your Patient.** Long-range goals and objectives tend to discourage patients. People, in general, like immediate gratification. Don't expect people who have a very serious dental disease caused by years of neglect to change overnight. Set such goals as learning how to remove plaque successfully with disclosing agents or learning how to floss properly. People like things they can see--a pretty smile, gums that don't bleed, and so forth. Unfortunately, a healthy mouth, by itself, has not proven to be a good motivator.

d. **Praise Your Patient.** Positive reinforcement is a terrific motivator. Brag about your patient's progress, even if it may seem slower than you like. Strongly encourage the patient that is trying diligently. Remember that patients that are criticized severely at every visit tend to stop coming in for treatment.

e. **Keep It Simple.** Using long professional sounding words are only impressive to you. They mean nothing to most patients. Use language they can understand. Use training aids as needed, especially when treating small children. Everyone enjoys the "show and tell" method.
2-7. DENTAL TREATMENT PLAN

a. DA Form 3984. Every effort should be made to ensure that each phase of a simple or complex treatment plan is carried out in a logical, sequential order and that each step complements and reinforces other phases of treatment. The DA Form 3984, Dental Treatment Plan, may be used to record the treatment plan and to serve as a functional outline for dental treatment (see figures 2-1 and 2-2). This form must be retained as a part of the patient's dental health record until the treatment plan has been accomplished or superseded. TB MED 250 outlines the proper procedures for filling in the Dental Treatment Plan, DA Form 3984. It states that the first step in developing a treatment plan is the accomplishing and recording a thorough examination of dental, oral, and adjacent tissue. The examination should include determining and recording the status of oral hygiene. Plaque-disclosing solutions may be used, but stainable material on the tooth surfaces should not serve as the sole criteria for oral disease activity. Although the presence of plaque implies a lack of self-care, bleeding from the gingival sulcus during probing serves as a better indication of oral disease.

b. Specific Preventive Measures. Specific preventive measures generally included in treatment plans are:

(1) Treatment required to prevent early development of emergency conditions.

(2) Individual instruction and motivation in self-care measures.

(3) Thorough prophylaxis.

(4) Topical application of a stannous fluoride solution.

c. Sequence of Appointments. Success in dentistry cannot be measured in absolute terms. If, during the accomplishment of a treatment plan, a patient has difficulty in controlling plaque, counseling and instruction should be intensified, but corrective care should not be interrupted except in extreme cases. A suggested sequence of appointments is found in Appendix B.
### Section I - Planned Treatment and Sequence of Accomplishment

<table>
<thead>
<tr>
<th>Line</th>
<th>Code</th>
<th>Type Treatment</th>
<th>Planned Sequence</th>
<th>Accomplished</th>
<th>Chart</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>URGENT</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>PERIODONTAL</td>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>PROPHYLAXIS</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>TOPICAL SF2</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>COUNSELING IN SELF CARE</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>OCCLUSION</td>
<td>6</td>
<td></td>
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</tr>
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<td>G</td>
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<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>RESTORATIONS</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>PROSTHESSES</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>OTHER (specify)</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Remarks or Instructions

Use this space for additional clarification of recommended treatment or for describing treatment which does not lend itself to charting. Indicate nature of treatment and teeth or other tissues involved. Identity entry by code letter (Column e, above).

- **A:** Remove decay and place IRM #30. Reevaluate after 120 days.
- **H:** #2, 3, 12, 13, 19 Amalgam Restorations
- **G:** Routine Exodontia #1, 16, 17, 32 impacted.
- **I:** Porcelain fused to metal bridge #7-9.

### Section II - Patient Identification

- **Date:** 13 Mar 93
- **Treatment Facility:** Happy Smile Dental Clinic
- **Signature of Dentist Recording Treatment Plan:** I.C. Teeth
- **Sex:** M
- **Race:** N
- **Grade:** E-4
- **Organization:** 123 Line Unit
- **Patient's Last Name:** Kay
- **First Name:** Minor D.
- **Middle Initial:** D.
- **Date of Birth:** 4 July 73
- **Identification Number:** 123-40-5678

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Figure 2-1. DA Form 3984, Dental Treatment Plan (front side of form).
**Figure 2-2. DA Form 3984, Dental Treatment Plan (reverse side of form)**

<table>
<thead>
<tr>
<th>CONSULTATION DESIRED (indicate by check mark(s))</th>
<th>REMARKS (if appropriate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 X PROSTHODONTIC</td>
<td>Please evaluate this patient for prosthetic replacement of missing #8. Implant #8, acid etch bridge and conventional fixed bridge are all treatment possibilities.</td>
</tr>
<tr>
<td>24 PERIODONTIC</td>
<td></td>
</tr>
<tr>
<td>26 ORAL SURGERY</td>
<td></td>
</tr>
<tr>
<td>28 OPERATIVE</td>
<td></td>
</tr>
<tr>
<td>27 CROWN AND BRIDGE</td>
<td></td>
</tr>
<tr>
<td>28 OTHER (specify)</td>
<td></td>
</tr>
</tbody>
</table>

29. **SECTION IV - CONSULTANT REMARKS AND RECOMMENDATIONS**

<table>
<thead>
<tr>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>#23 Recommend acid etched bridge replacement of missing #8. ABC</td>
</tr>
</tbody>
</table>

(DA Form 3984 may be used to record the treatment plan and to serve as a functional outline for dental treatment. The purpose is to ensure that each phase of a simple or complex treatment plan is carried out in a logical, sequential order and that each step complements and reinforces other phases of treatment. DA Form 3984 is retained as a part of the Dental Health Record until accomplished or superseded. Reference: TB MED 250, Recording Dental Examination, Diagnosis and Treatments, and Appointment Control.)
Section II. PLAQUE, CALCULUS, AND STAINS

2-8. GENERAL

Basic information related to preventive dentistry is described in the paragraphs that follow. This includes tests given during oral examination, types of dental plaques, the formation of calculus, and the classification of dental stains caused by either external or internal factors.

2-9. TESTS GIVEN DURING ORAL EXAMINATION

The dental specialist generally performs and records the tests that measure gingival bleeding and plaque accumulation.

a. Gingival Bleeding Index. A gingival bleeding index (GBI) is a test to determine if the gingiva bleeds upon slight provocation. The technique of performing this test is very simple. Dental floss is inserted between the contact points of two teeth. The floss is wrapped around the proximal surface in a bucco-lingual manner. The floss is gently moved to the depth of the gingival sulcus. Then the floss is removed gently. Test the mesial and distal surfaces of teeth numbers 3, 8, 14, 19, 24, and 30. Use adjacent teeth if the patient is missing any of these teeth. The tested area should be observed for 15 seconds. If bleeding occurs, mark a one (1) above the area on the chart. If no bleeding occurs, mark a "0" for that area. The total of all the areas is the gingival bleeding index. Procedures for taking the GBI is found in Appendix C.

b. Plaque Index. The plaque index measures stained plaque accumulation on selected tooth surfaces. This parameter is a direct measure of the patient's oral hygiene effectiveness. A step-by-step explanation of the plaque index is found in Appendix C.

2-10. DENTAL PLAQUES

a. General. It is generally agreed that the cause of dental caries and periodontal disease is a substance called plaque. Mucin (a sticky protein material) from the saliva adheres to the surfaces of the teeth when the teeth are not properly cleaned. Food particles, dead tissue cells, and tissue fluids become trapped in the mucin, establishing an excellent medium for the growth of bacteria and other microorganisms. Once incorporated into mucin, these microorganisms are protected and are not removed by the flushing action of saliva or any fluids taken by mouth. This mucin network, with food, cellular debris, and exudate, becomes an excellent medium for the growth of microorganisms. Once the microorganisms organize in this medium, they protect themselves from the flushing and diluting action of the saliva. If the microorganisms in these plaques are disorganized or broken up or if the plaque is completely removed, then the cause of the disease is removed. Once the plaque is removed, it takes about 24 hours for the microorganisms to reform, reorganize, and resume production of damaging products.
b. **Cariogenic Plaque.** Plaque containing microorganisms which cause dental decay (caries) are called cariogenic plaque. When refined carbohydrates, such as sucrose (table sugar), are put into solution in the mouth fluids, they are able to penetrate into the plaque. Once inside the plaque, microorganisms metabolize the carbohydrates and produce an acid. This acid, held in the plaque and adhering directly against the tooth surface, starts the process of dental caries by the destruction of (demineralizing) enamel.

c. **Periogenic Plaque.** Periogenic plaque forms at or near the gingival tissue level on the tooth. It affects the periodontal structures (tissue, periodontal ligament, and bone), provoking an inflammatory response, which is seen as periodontal disease. The microorganisms do not produce damage by demineralization as in the case of cariogenic plaque. This plaque becomes mineralized to form a hard substance known as calculus. The organized microorganisms in this plaque produce toxins which first destroy the integrity of the epithelium covering the gingiva and, eventually, affect the other periodontal tissues.

### 2-11. CALCULUS

a. **General.** In time, calcium salts from the saliva precipitate into the periogenic plaque. This calcific accretion is called calculus. Present on the outer layer of the calculus is the periogenic plaque which continues to produce toxins that irritate and destroy the periodontal tissues. Some plaque may reach maximum mineral content in two days. Other plaque may be 50 percent calcified in two days and 60 to 90 percent calcified in 12 days. Most calculus is 70 to 90 percent inorganic, consisting mostly of calcium salts. Calculus, once hardened, can no longer be effectively removed by the patient but must be scaled away by a dental specialist, preventive dental specialist, or dentist.

b. **Supragingival Calculus.** Supragingival calculus (salivary calculus) collects on the clinical crown (tooth surfaces not covered by gingival tissue). See figure 2-3. It is a hard, calcified material removed by the preventive dental specialist during an oral prophylaxis. Supragingival calculus is usually white to creamy-white, but it may be stained darker by food, tobacco, or other material. It may be found anywhere in the mouth, especially on the lingual and proximal surfaces of mandibular anterior teeth and the facial and proximal surfaces of the maxillary first and second molars. These are common sites for calculus formation because they are near the openings of salivary ducts. Saliva is the main source of inorganic material for formation of calculus. The inorganic structure of supragingival calculus is primarily calcium phosphate (76 percent), mainly in the form of hydroxyapatite crystals (58 percent). The organic portion (10 to 30 percent) consists of dead microorganisms, epithelial cells, plaque matrix, and margin.
c. **Subgingival Calculus.** Subgingival calculus, harder and darker than supragingival calculus, is located below the crest of the marginal gingiva and is not visible upon oral examination. See figure 2-3. Subgingival calculus ranges from dark brown to greenish-black in color, is flint-like in consistency, and is firmly attached to the tooth surface. Location of subgingival calculus is determined by careful probing with an explorer or by using the air syringe. The inorganic component is primarily calcium phosphate (70 to 90 percent). The organic component (10 to 30 percent) contains no salivary protein, only serum protein.
2-12. STAINS

a. General. Dental stains are simply defined as pigmented deposits either on the tooth surface or within the tooth structure. Dental stains are of particular importance to the preventive dentistry specialist and the dental officer since stains may be an indicator of poor oral hygiene and destructive oral habits. Dental stains may also indicate the presence of a more serious general health problem. Much time and effort is spent removing stains from patients' teeth, primarily because they can become serious esthetic problems. Dental stains are further classified by their source and location. Classification by source is listed as either exogenous (stain that is produced outside the tooth) or endogenous (stain that is produced inside the tooth). An example of an exogenous stain is tar from tobacco smoke. An example of endogenous stain is a brown stain from too much fluoride (fluorosis) occurring inside the enamel. Stains classified by location are either extrinsic (external) or intrinsic (internal). Extrinsic stains are caused by food, chemicals, or color-producing (chromogenic) microorganisms. Intrinsic stains are caused by pulpal disease, tetracycline therapy, enamel hypoplasia, porphyria, or erythroblastosis fetalis.

b. Extrinsic Stains.

(1) Brown stain. Brown stain is usually because of a bacteria-free, pigmented-acquired pellicle. This stain is found on the buccal surfaces of maxillary molars and on the lingual surfaces of mandibular incisors.

(2) Tobacco stain. Tobacco stain is generally dark brown or black in color due to coal tar combustion products. This stain is very difficult to remove and is the most common stain encountered in any dental practice.

(3) Green stain. Green stain is caused by color-producing (chromogenic) bacteria or fungi. This stain is most common in children, since it occurs primarily in the remains of the enamel cuticle of newly erupted teeth. This stain is also seen most commonly on the facial surfaces of the maxillary anterior teeth.

(4) Black stain. Black stain is also caused by chromogenic bacteria and occurs as a narrow band just above the gingival margin. It is seen in both adults and children and is easily removed.

c. Intrinsic Stains.

(1) Pulpal disease. This black to reddish stain is caused by the leakage of blood components (heme) into the dentinal tubules. This stain is usually removed after endodontic therapy to the tooth by the use of oxidizing agents (bleaching).
(2) **Tetracycline therapy.** This yellow to brown stain was more of a problem a few years ago than it is today. Tetracycline is a broad spectrum antibiotic that was used extensively in young children for many types of infections. Physicians and dentists realized several years ago the serious side effect of tooth discoloration. The amount of stain depends on the dosage and the time that the drug is administered. The stain is incorporated into the hydroxyapatite crystals of the enamel and the dentin of the forming tooth and cannot be polished out. Some limited success is attained with various vital bleaching techniques, but they are time consuming. These techniques may also damage the teeth and the results are unpredictable. Therefore, the ideal treatment is some type of restorative dentistry. Full coverage crowns are preferred, but cannot be used in children because of the risk of pulpal damage during crown preparation. Recently, many types of veneer facings and acid resin techniques have been used to correct this problem.

(3) **Enamel hypoplasia.** Hypoplastic enamel occurs from many causes during tooth formation and appears as pits or fissures on the enamel surface. This defect of tooth enamel is not a stain in itself, but allows for easier staining of the teeth by other agents.

(4) **Porphyria.** Porphyria is a metabolic disease that causes an overproduction of one of the blood-forming substances called porphyrin. Porphyrin, a brown-purple substance, has an attraction for teeth and bones. Porphyria is a rare disease and is not commonly seen in dental practice. Patients with porphyria have sores on the face and hands as well as darkly stained teeth.

(5) **Erythroblastosis fetalis.** This disease is a hemolytic anemia of the fetus or newborn infant that causes an excess amount of blood-forming pigment to be circulated in the blood. These pigments range from green to blue to brown and are deposited in the enamel and in the dentin of the forming teeth.
EXERCISES, LESSON 2

INSTRUCTIONS: Answer the following exercises by marking the lettered response that best answers the question or best completes the incomplete statement or by writing the answer in the space provided.

After you have completed all the exercises, turn to "Solutions to Exercises" at the end of the lesson and check your answers.

1. A list of responsibilities follows. Match the duty to the person responsible for performing the action.

   a.  = Dental Specialist
   b.  = Preventive Dental Specialist

   (1) _____ Performs root planing and curettage.
   (2) _____ Instructs patients on basic oral hygiene care.
   (3) _____ Applies topical fluoride to the teeth.
   (4) _____ Conducts oral history interviews.
   (5) _____ Removes all tooth deposits.
   (6) _____ Applies pit and fissure sealants.
   (7) _____ Performs and records plaque and gingival bleeding indices.
   (8) _____ Instructs in preventive dentistry.

2. Complete the following statements related to patient motivation.

   a. Learning to be a good ___________________ is essential.

   b. The goal in a preventive dentistry education program is to _______________ the patient that the new oral health ________________ are beneficial.
3. List two common barriers to effective two-way communication with patients.
   a. ________________________________
   b. ________________________________

4. Complete each sentence of the following list of approaches to effective patient care.
   a. _______________ about your patient.
   b. Establish the patient's dental ________________.
   c. Set ________________ goals for your patient.
   d. ________________ your patient.
   e. Keep it ________________.

5. What official form is used to serve as a functional outline for dental treatment?
   The ___Form __________, ________________ Plan.

6. Use Appendix B for this exercise. Match the action in Column I to the suggested appointment sequence in Column II. Items in Column II may be used more than once. Actions in Column I may require more than one response.

<table>
<thead>
<tr>
<th>COLUMN I</th>
<th>COLUMN II</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) ___</td>
<td>Show improvement on bleeding index and plaque index. a. First appointment</td>
</tr>
<tr>
<td>(2) ___</td>
<td>Evaluate brushing and flossing techniques. b. Second appointment</td>
</tr>
<tr>
<td>(3) ___</td>
<td>Recommend specific home-care therapy. c. Third appointment</td>
</tr>
<tr>
<td>(4) ___</td>
<td>Have patient floss, again emphasizing speed. d. Fourth appointment</td>
</tr>
<tr>
<td>(5) ___</td>
<td>Record appropriate remarks.</td>
</tr>
</tbody>
</table>
7. For the GBI, floss is wrapped around the proximal surface of the tooth in a buccolingual manner and the depth of gingival sulcus is measured.
   
   a. List the numbers of the teeth tested.
      ________________________________
   
   b. List the two surfaces tested.
      ________________________________
   
   c. State how long you must wait after flossing before scoring.
      ________________________________
   
   d. List the maximum GBI.
      ________________________________

8. For the plaque index, a patient's teeth are stained with a disclosing tablet.
   
   a. Write the numbers of the teeth on which scoring is done on the **facial** surfaces.
      ________________________________
   
   b. Write the numbers of the teeth on which scoring is done on the **lingual** surfaces.
      ________________________________
   
   c. The maximum score for any one tooth is ____________.
9. Match the description in Column I to the term in Column II.

<table>
<thead>
<tr>
<th>COLUMN I</th>
<th>COLUMN II</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Produces an acid and demineralizes enamel.</td>
<td>a. Mucin.</td>
</tr>
<tr>
<td>(2) Forms at or near the gingival tissue level.</td>
<td>b. Mucin network.</td>
</tr>
<tr>
<td>(3) A sticky protein material.</td>
<td>c. Cariogenic plaque.</td>
</tr>
<tr>
<td>(4) Includes food particles, cellular debris, exudate.</td>
<td>d. Periogenic plaque.</td>
</tr>
</tbody>
</table>

10. Most calculus consists mostly of _______ from saliva precipitate.

11. How many days does it take plaque to become calcified (reach maximum mineral content)?  

12. Match the following list of characteristics to the type of calculus.

   a. Supragingival calculus.  
   b. Subgingival calculus. 

   (1) Collects on the clinical crown.  
   (2) Below the crest of the marginal gingiva.  
   (3) Dark-brown to greenish black in color.  
   (4) Usually white to creamy-white.  
   (5) Near salivary opening.  
   (6) Has serum protein.  
   (7) Flintlike in consistency.  
   (8) Especially on the lingual and proximal surfaces of mandibular anterior teeth.  
   (9) Especially on the facial and proximal surfaces of the maxillary first and second molars.  

MD0513 2-16
13. Which dental stain is the most common stain?
   a. Pulpal disease.
   b. Enamel hypoplasia.
   c. Black stain.
   d. Erythroblastosis fetalis.
   e. Tobacco stain.

14. Select the exogenous stain.
   a. Pulpal disease.
   b. Enamel hypoplasia.
   c. Tobacco tar.
   d. Porphyria.
   e. Tetracycline therapy.

15. Select the endogenous stain.
   a. Green stain.
   b. Fluorosis.
   c. Brown stain.
16. Which stain is found on the buccal surfaces of maxillary molars and on the lingual surfaces of mandibular incisors?
   b. Enamel hypoplasia.
   c. Green stain.
   d. Fluorosis.
   e. Black stain.

17. Which stain is seen most commonly on the facial surfaces of the maxillary anterior teeth?
   b. Enamel hypoplasia.
   c. Black stain.
   d. Fluorosis.
   e. Green stain.

18. Which stain is the result of hemolytic anemia causing an excess amount of blood-forming pigment to be circulated in the blood?
   a. Pulpal disease.
   b. Porphyria.
   c. Black stain.
   d. Erythroblastosis fetalis.

Check Your Answers on Next Page
1. (1) b (para 2-3a(2))
   (2) a (para 2-2a(2))
   (3) b (para 2-3a(3))
   (4) a (para 2-2a(1))
   (5) b (para 2-3a(1))
   (6) b (para 2-3a(6))
   (7) a (para 2-2a(3))
   (8) b (para 2-3a(4))

2. a. listener
   b. convince; habits (para 2-4)

3. a. Fear.
   b. Inactivity. (para 2-5)

4. a. Learn
   b. intelligence quotient
   c. short-range
   d. Praise
   e. simple (para 2-6)

5. DA Form 3984, Dental Treatment Plan (para 2-7a)

6. (1) c
   (2) b
   (3) a
   (4) d
   (5) b,c,d (Appendix B)

7. a. numbers 3, 8, 14, 19, 24, and 30
   b. mesial, distal
   c. 15 seconds
   d. 12 (para 2-9a; Appendix C)

8. a. numbers 3, 8, 14, 24
   b. numbers 19, and 30
   c. 3 (para 2-9b; Appendix C)

9. (1) c
   (2) d
   (3) a
   (4) b (para 2-10)
10. Calcium salts (para 2-11a)

11. 2 to 12 days. (para 2-11a)

12. (1) a
    (2) b
    (3) b
    (4) a
    (5) a
    (6) b
    (7) b
    (8) a
    (9) a (paras 2-11b, c)

13. e (para 2-12b(2))

14. c (para 2-12a)

15. b (para 2-12a)

16. a (para 2-12b(1))

17. e (para 2-12b(3))

18. d (para 2-12c(5))