

Reyhaneh Nejad

DNTH 660

Student Teaching #2

Lesson Plan

Spring 2023

Course: DHYG 150 Dental Hygiene Theory and Clinic II

Topic: Care of Dental Prostheses

Audience: Adult Learners (First-year Dental Hygiene Students)

Time: 50 minutes

Materials: Computer, Projector, PowerPoint, Howard Community College Program Manual (HCC)

Instructional Objectives:

Upon completion of the lecture, the student should be able to:

1. Define dental prostheses and related dental prostheses key terms.
2. Differentiate types of dental prostheses and their characteristics.
3. Discuss different types of dental prosthesis cleaners and their components.
4. Propose dental hygienist examination and treatment for patients with dental prostheses.
5. Recommend an appropriate homecare plan for patients' dental prostheses.

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TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
3 minutes	<p>I. ANTICIPATORY SET</p> <p>A. <u>Introduction</u></p> <p><i>“All Tim wanted was to smile without embarrassment and enjoy his favorite foods. Unfortunately, chronic tooth loss made it increasingly difficult to chew anything other than soft foods. This meant seafood and barbecues were off the menu. Tim’s hesitancy to smile also negatively impacted his social life.”</i></p> <p>Fortunately, there were varieties of dental treatments for Tim. His smile received a first-class upgrade. He was able to smile and eat his favorite food again. His treatment included full-arch rehabilitation with dental implants. He had a full maxillary and mandible overdenture.</p> <p>Since civilization humans have attempted to replace their missing teeth. According to The History of Dentistry, dentures date all the way back to 2500 B.C. when they were made from animal teeth. Centuries later, the ancient Egyptians and the Etruscans made dentures from bone, wire, and repurposed animal and human teeth.</p> <p>Dentistry progressed significantly. Today we have so many options to replace the missing teeth. Dental prostheses help patients to restore their smile and mouth functionality. Preventive care and maintenance of dental prostheses have an essential role in the longevity of dental prostheses.</p> <p>B. <u>Gain Attention/Motivate</u></p> <p>If Tim was in your operatory chair, would you know what is the proper preventive maintenance for his dental prostheses? How could you help him to maintain his prosthesis in good condition so he can stay proud of his smile and continue enjoying his favorite foods as long as possible?</p>	<p>Slide #1 Care of Dental Prostheses- Title</p> <p>Note: This quote is from a patient who regained his confidence and joy after receiving dental prostheses due to teeth lost.</p> <p>Q: In your opinion, is brushing and flossing sufficient to maintain oral health in a patient with dental prostheses?</p> <p>A: Answers will vary, but the students will learn that the correct answer is “No”.</p> <p>Slide #2 Dental Prostheses History</p> <p>Slide#3 Picture of Tim with New Prostheses</p> <p>Note: Point out the before and after dental treatment images of Tim’s mouth</p>

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
1 minutes	<p>C. <u>Activate Prior Knowledge</u> At this point of your life, you may have encountered someone with dental prosthetics. Are you familiar with different kinds of dental prostheses? As a dental hygienist do you know how to properly perform oral hygiene care for patients with dental prostheses?</p> <p>D. <u>Establish Rationale</u></p> <p>This lecture will provide you with information on different types of dental prostheses and specific dental hygiene care for each of them.</p> <p>E. <u>Present Instructional Objectives</u> After today’s lecture, you should be able to:</p> <ol style="list-style-type: none"> 1. Define dental prostheses and related dental prostheses key terms. 2. Differentiate types of dental prostheses and their characteristics. 3. Discuss different types of dental prosthesis cleaners and their components. 4. Propose dental hygienist examination and treatment for patients with dental prostheses. 5. Develop an appropriate homecare plan for patients’ dental prostheses. 	<p>Slide #3: Objectives</p>

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
1 minute	<p>I. Dental prostheses</p> <p>A. Definition: An artificial replacement of missing one or more teeth and supporting structures.</p> <ol style="list-style-type: none"> 1. types: <ol style="list-style-type: none"> a. Removable b. Fixed 2. Benefit: <ol style="list-style-type: none"> a. Replaces the missing teeth b. Patient comfort and confidence 	<p>Slide #4 Dental Prostheses Definition and Types</p> <p>Slide #5 Dental Prosthesis Categories</p> <p>Slide #6 Benefit of Dental Prostheses</p>
1 minute	<p>B. Dental prosthesis categories:</p> <ol style="list-style-type: none"> 1. Partial denture 2. Obturator 3. Complete denture <p>II. Missing teeth:</p> <p>A. Contributing factors</p> <ol style="list-style-type: none"> 1. long history of poor oral hygiene care and Caries lesions (most common) 2. Periodontal 3. Genetic 4. Trauma and injuries <p>B. No replacement needed</p> <ol style="list-style-type: none"> 1. Third molars 2. Extracted second molars no opposing teeth 3. Orthodontic extraction <p>C. Risk of not replacing the missing teeth:</p> <ol style="list-style-type: none"> 1. Adjacent teeth migration 2. Opposing teeth migration 3. Stress and extra force on remaining teeth <p>D. Replacement options</p> <ol style="list-style-type: none"> 1. Fixed prosthesis 2. Removable prosthesis 3. Dental implants 	<p>Note: Show the picture of removeable partial denture as an example of removable prostheses and dental bridge for fixed prostheses.</p> <p>Q: What are the most common causes of missing teeth?</p> <p>A: Answer will vary, but most likely some students would mention the caries lesions and poor oral hygiene.</p>
2 minutes	<p>III. Fixed partial denture prostheses:</p> <ol style="list-style-type: none"> 1. Description: Restoration that replaces missing teeth and permanently attached to adjacent teeth or dental implants 2. Also known as dental bridges 3. Composition <ol style="list-style-type: none"> a. Abutment b. Connectors c. Pontics 4. Materials <ol style="list-style-type: none"> a. Metal b. Ceramics c. Combination of both 	<p>Slide #7 Missing Teeth Replacement</p> <p>Slide #8 Risk of Not Replacing the Missing Teeth</p> <p>Slide# 9 Replacement Options for Missing Teeth</p> <p>Slide# 10 Fixed Partial Denture and its Compositions</p> <p>Note: Fixed partial denture is attached by cement to the teeth or implants</p> <p>Q: What is another name for fixed partial denture?</p> <p>A: Dental bridge</p>

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
2 minutes	<p>A. Characteristics</p> <ol style="list-style-type: none"> 1. Natural tooth supported <ol style="list-style-type: none"> a. Traditional/ bilateral b. Cantilever c. Resin retained <ol style="list-style-type: none"> i. Common name: Maryland bridge 2. Implant supported 	<p>Slide #10 Fixed Partial Characteristics</p> <p>Note: Activity: Show the students different intraoral images along with the radiographs and ask them to identify the bridge types.</p>
2 minutes	<p>B. Patient home care instruction</p> <ol style="list-style-type: none"> 1. Abutment care: <ol style="list-style-type: none"> a. Debris removal <ol style="list-style-type: none"> i. Oral irrigation ii. Toothbrush and other aids b. Biofilm removal of abutment teeth <ol style="list-style-type: none"> i. Brushing: Sulcular ii. Dentifrice: Nonabrasive, Fluoride-containing 2. Pontic and beneath care <ol style="list-style-type: none"> a. Tooth brushing <ol style="list-style-type: none"> i. Charters b. Floss threader <ol style="list-style-type: none"> i. Clear plastic ii. Tinted plastic iii. Soft plastic iv. Flexible wire v. Twisted wire c. Other interdental devices <ol style="list-style-type: none"> i. Space allows interdental brushes <p>C. Dental hygienist considerations</p> <ol style="list-style-type: none"> a. Areas requiring emphasis b. Margins check for: <ol style="list-style-type: none"> i. Irregularity ii. Plaque retention c. Mobility check d. Plaque control assessment e. Inflammation check f. Planning most effective and efficient dental tools for patient 	<p>Slide #11 Patient Home Care Instruction</p> <p>Slide #12 Waterpik Resources.</p> <p>Note: Please take some time to review the provided links. These links provide you with good waterpik educational resources for your patient.</p> <p>Slide #13 Different Types of Floss Threaders</p> <p>Q: Based on information provided what is the best home care tool for abutment care?</p> <p>A: Oral care tools are patient specific based on the ability of patient. Dental hygienists need to evaluate what works best for each patient.</p> <p>Note: Emphasize that margins for restoration may provide irregular areas for collecting biofilm and require daily attention.</p> <p>Slide #14 Dental Hygienist Consideration and Treatment</p>

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
6 minutes	<p>IV. Removal partial denture prostheses:</p> <p>A. Description: Dental prosthetic replaces partial tooth loss</p> <ol style="list-style-type: none"> 1. Replacement of one or more but not all the teeth 2. Removable 3. Includes base and artificial teeth <p>B. Components</p> <ol style="list-style-type: none"> 1. Metal framework <ol style="list-style-type: none"> a. Chrome cobalt 2. Abutment teeth <ol style="list-style-type: none"> a. Abutment teeth b. Abutment implant 3. Depend on location receives support from <ol style="list-style-type: none"> a. Partially tooth borne b. Partially implant borne c. Partially tissue borne 4. Artificial teeth <ol style="list-style-type: none"> a. Porcelain b. Plastic resin c. Metal <p>C. Patient home care instruction</p> <ol style="list-style-type: none"> 1. Biofilm control of prosthesis <ol style="list-style-type: none"> a. Rinsing <ol style="list-style-type: none"> i. Use of water b. Brushing <ol style="list-style-type: none"> i. Light grasp ii. Separate toothbrushes for only prosthesis use not be used on natural teeth iii. No power brush iv. Claps brush v. Denture brush vi. Placing towel in the sink to prevent breakage in case of dropping c. Immersion <ol style="list-style-type: none"> i. Use of non-corroding agents 2. Biofilm control of natural teeth <ol style="list-style-type: none"> a. tooth brushing b. interdental cleaning 3. Dental caries prevention 	<p>Slide #15 Removal Partial Denture Prostheses</p> <p>Slide #16 Abutment of Removal Denture</p> <p>Slide #13 Supporting Teeth</p> <p>Slide #14 Artificial Teeth</p> <p>Slide #15 Patient Home Care Instruction video (3:00 minutes)</p> <p>Slide #16 Important Consideration on Partial Denture</p> <p>Note: Emphasis that power toothbrushes should not be used on removable partial denture.</p> <p>Q: In case the patient decided to use a regular toothbrush for cleaning the partial denture, can the same toothbrush be utilized for biofilm removal from the natural teeth?</p> <p>A: Answer is “No”. Metal parts of partial may deform the toothbrush filaments and make the brush ineffective for use on natural teeth.</p>

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
2 minutes	<ul style="list-style-type: none"> a. Toothpaste with fluoride b. Mouth wash with fluoride <p>D. Dental hygienist considerations</p> <ul style="list-style-type: none"> 1. In office prosthesis cleaning 2. EIOE -patient needs to remove the partial denture 3. Oral hygiene instruction 4. Biofilms control 5. Dental hygiene treatment for natural teeth <ul style="list-style-type: none"> a. Follow recommended steps in dental hygiene program manual Cleaning Dental Appliances (Partials or dentures)- page 146 b. Oral hygiene care plan <ul style="list-style-type: none"> i. Removal of prosthesis ii. Cleaning and biofilm control iii. Checking for any damage on prosthesis iv. Care of natural teeth v. Recommendation on home care tools and dentifrices vi. Scaling of natural teeth vii. Fluoride treatment viii. Caries prevention of natural teeth/ sealant 	<p>Slide# 17: Dental Hygienist Consideration for Removable Partial Denture</p> <p>Note: Underlying gingival tissue can negatively be affected by a removable partial denture since biofilms accumulate more rapidly and in great quantity.</p> <p>Q: Can you list the proper steps for denture cleaning in Howard Community College Dental Clinic using the HCC manual?</p> <p>A: Students will refer to program manual page# 146 and explain the steps.</p> <p>Slide #18 Care Plan for Patient with Removable Partial Denture</p> <p>Note: Highlight that the risk of root caries is significantly increased when appliance shows signs of wear.</p>
2 minutes	<p>V. Obturator denture:</p> <p>A. Description: Prosthesis used to close palatal defects</p> <ul style="list-style-type: none"> 1. Resin base with retainer clasps 2. Depending on location may have anterior prosthetic teeth <p>B. Purpose and uses</p> <ul style="list-style-type: none"> 1. Cancer of head involving maxilla 2. Cocaine abusers with necrosis of nasal septum and surroundings due to cocaine snorting 3. Defected area due to trauma 4. Cleft palate 	<p>Slide #19 Obturator Denture</p> <p>Q: What are some palatal defects that can lead to the use of obturator denture?</p> <p>A: Answer will vary, but students will learn that cancer, cleft palate, necrosis of nasal septum and palatal trauma.</p> <p>Slide #20 Purpose and Use of Obturator Denture</p>

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
2 minutes	<p>C. Patient home care</p> <ol style="list-style-type: none"> 1. Daily cleaning of obturator following the care given for removable partial denture 2. Sleep with obturator in place if the defect is severe <ol style="list-style-type: none"> a. Remove for the short period during the day 3. Biofilm removal and control of natural teeth <p>D. Dental hygienist treatment and considerations</p> <ol style="list-style-type: none"> 1. Obturator may need to stay in the mouth during dental hygiene treatment <ol style="list-style-type: none"> a. Depend on size of the palatal defect b. Remove during radiograph and oral cancer screening, calculus and biofilm removal c. Semiannual visit required <ol style="list-style-type: none"> i. check the defect ii. check the obturator d. treatment of natural dentition <ol style="list-style-type: none"> i. calculus and stain removal ii. Fluoride therapy based on carries risk iii. Reviewing oral hygiene instruction for natural dentition and obturator 	<p>Slide #21 Home Care of Obturator Denture</p> <p>Slide #22: Dental Hygienist Treatment and Considerations</p> <p>Note: Emphasis that depend on the size of palatal defect obturator may need to stay in the mouth during dental hygiene treatment to prevent choking or aspiration of water and other materials.</p> <p>Q: Does dental obturator need to be removed during radiograph?</p> <p>A: Answer is “Yes”. An appliance with metal clasps will interfere with radiolucency of the teeth and surrounding tissues.</p>
1 minutes	<p>VI. Complete denture prostheses:</p> <p>A. Definition: Dental prosthetic devices that replace a complete arch of missing teeth</p> <ol style="list-style-type: none"> 1. Type of dentures: <ol style="list-style-type: none"> a. Interim denture-temporary for diagnosis and treatment b. Conventional denture-long term complete denture prosthesis c. Implant denture d. Primary teeth denture <p>B. Components</p> <ol style="list-style-type: none"> 1. Denture base-rest on oral mucosa <ol style="list-style-type: none"> a. Plastic acrylic resin materials b. Metals: Chrome- cobalt or gold c. Combination of plastic and metal 	<p>Slide #23: Complete Denture Prostheses</p> <p>Slide #24: Components of Complete Denture</p> <p>Slide #25: Denture Base</p>

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
5 minutes	<p>2. Surface</p> <ul style="list-style-type: none"> a. Impression surface <ul style="list-style-type: none"> i. Not polished ii. Adhesive material placed in this area b. Polished surface <ul style="list-style-type: none"> i. Outer surface c. Occlusal surface <ul style="list-style-type: none"> i. Surface that makes contact with opposing denture or natural teeth <p>3. Denture teeth</p> <ul style="list-style-type: none"> a. Made of plastic acrylic resin b. Metal occlusion be used to stable vertical dimension <p>C. Denture deposits</p> <ul style="list-style-type: none"> 1. Mucin and food <ul style="list-style-type: none"> a. Removed by rinsing and brushing 2. Pellicle and biofilm constant formation- right after cleaning <ul style="list-style-type: none"> a. Gram positive cocci, rod and filamentous forms b. <i>Candida albicans</i>, gram negative bacteria c. Statistic 3. Calculus <ul style="list-style-type: none"> a. Forms on denture surfaces especially maxillary molar and lingual of mandibular anterior 4. Stains <ul style="list-style-type: none"> a. Diet related: coffee, tea, red wine and tobacco <p>D. Patient home care of complete denture</p> <ul style="list-style-type: none"> 1. Remove denture at night or during the day for few hours 2. Inspect for deposit 3. Use denture brush 4. Immerse in denture cleaning solution, follow manufacture guide 	<p>Slide #26: Denture Surface and Teeth</p> <p>Note: After presenting all the components of denture, show the image of the upper and lower denture and ask the students to label the parts.</p> <p>Q: Where should adhesive be applied if the patient needs to apply adhesive to the denture for better stability?</p> <p>A: On impression surface.</p> <p>Slide #27: Denture Deposits</p> <p>Note: High correlation between the bacterial species in denture plaque and pharyngeal microflora which is a bacterium causing pneumonia. Dentures should be considered an important reservoir of bacteria which could colonize pharynx.</p> <p>Slide #28: Denture Stains</p> <p>Note: Play the video on how to care for denture (3:00 minutes)</p>

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
3 minutes	<p>5. Clean after each eating</p> <p>6. Clean manually at bedtime</p> <p>7. Each day use chemical immersion, usually overnight</p> <p>E. Cleaning complete denture by immersion</p> <ol style="list-style-type: none"> 1. Advantage <ol style="list-style-type: none"> a. Solution reaches all the surfaces b. Minimize the danger of dropping c. Offers safe storage d. Easy to use for caregivers 2. Chemical solution cleaner: <ol style="list-style-type: none"> a. Alkaline peroxide <ol style="list-style-type: none"> ii. Combine with oxygen liberating agents iii. Loosens debris and light stains b. Dilute acids <ol style="list-style-type: none"> i. Inorganic acids ii. Not for at home use, can cause erosion c. Enzymes <ol style="list-style-type: none"> i. Corporate in varies type-immersions cleaners/ break down the biofilm proteins d. Disinfectants <ol style="list-style-type: none"> i. Sodium hypochlorite /destroys most microorganisms 3. Type of at home solution <ol style="list-style-type: none"> a. Powder or tablet; length of immersion, 10-15 minutes b. Hypochlorite solution: (1 table spoon house hold bleach, 2 tsp Calgon, 4 ounces of water). Immersion length: 10-15 min 	<p>Slide #29 Cleaning Denture by Immersion</p> <p>Note: Highlight the denture needs to be cleaned manually several times each day after eating and before bedtime.</p> <p>Q: When the immersion method is used, can the patient place the denture with adhesive in a cleaning solution?</p> <p>A: The answer is "No." Adhesive needs to be removed before placing the denture in the cleaning solution.</p> <p>Slide #30 Chemical Solution Cleaners</p> <p>Slide #31 At Home Solution Cleaners</p> <p>Note: Point out that hypochlorite can cause corrosion. Not to exceed 10 at most 15 minutes.</p> <p>Note: Emphasize that if the patient is using household bleach. Instruction for dilution needs to be followed and immersion length should not exceed more than 15 min.</p>

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
2 minutes	<p>F. Denture brushes</p> <ol style="list-style-type: none"> 1. Two sides <ol style="list-style-type: none"> a. Round to access inner area b. Rectangular for polished and occlusal surfaces <p>G. Underlying mucosa</p> <ol style="list-style-type: none"> 1. Examination <ol style="list-style-type: none"> a. Oral cancer screening b. Daily examination by patient 2. Rinsing <ol style="list-style-type: none"> a. Each time denture is removed rinse the mouth <ol style="list-style-type: none"> I. Salt and water solution if no salt restriction 3. Cleaning <ol style="list-style-type: none"> a. Soft toothbrush with end round filaments <ol style="list-style-type: none"> I. Using light pressure from posterior to anterior II. Clean the surface of the tongue using tongue cleaner 4. Massage to increase blood circulation <ol style="list-style-type: none"> a. Digital b. Thumb and index figure over the ridge using place and release stroke c. Soft toothbrush d. Side of filaments vibratory motion e. Power brush-No pressure, smooth and even strokes 5. Soft tissue condition <ol style="list-style-type: none"> a. Denture stomatitis <ol style="list-style-type: none"> i. Erythema of underlying tissue associated with <i>C. albicans</i> ii. Poor hygiene, smoking, continues wear of denture b. Traumatic ulceration <ol style="list-style-type: none"> i. Ill fitting denture ii. Rough spots on denture c. Angular cheilitis 	<p>Slide #32: Denture Brush</p> <p>Slide #33 Underlying Mucosa Examination</p> <p>Slide #34 Massaging the Gingival</p> <p>Slide #35 Soft Tissue Conditions</p> <p>Note: show the image of each conditions.</p> <p>Q: Which microorganism can cause erythema, itching, and pain in the tissue under the denture? How can this be prevented?</p> <p>A: <i>C. albicans</i>. Improving denture hygiene and removing the denture at night or for a period of time each day.</p>
2 minutes		

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
3 minutes	<ul style="list-style-type: none"> i. Irritation from saliva due to anatomical changes that makes the folds at the corners of the mouth deeper ii. <i>C. albicans</i>- poor oral hygiene iii. B vitamins deficiency - elderly patient d. Epulis formation <ul style="list-style-type: none"> i. Long -standing chronic inflammatory of tissue ii. Combination of poor oral care, smoking, <i>C. albicans</i> <p>H. Adhesive for denture</p> <ul style="list-style-type: none"> 1. Some patient uses it for added security of denture 2. Is not a solution for ill-fitting dentures 3. May be necessary for immediate and interim dentures due to healing of underlying tissue <p>I. Dental hygienist treatment for complete denture</p> <ul style="list-style-type: none"> 1. Oral cancer screening / patient needs to remove the denture 2. Exam underlying tissue 3. Oral hygiene instruction 4. In-office cleaning of dentures <ul style="list-style-type: none"> a. Follow the dental hygiene manual steps page: 5. Calculus removal if indicated 6. Scaling of the natural teeth if present 7. Panoramic radiograph for the edentulous patient 	<p>Slide #36 Adhesive for Denture</p> <p>Note: highlight that adhesive is not a solution for ill-fitting denture.</p> <p>Slide# 37 Dental Hygienist Treatment for Complete Denture</p> <p>Q: Can dental hygienist use ultrasonic to remove the calculus from denture?</p> <p>A: Answer will vary; but after watching the video, students will learn that ultrasonic can be used cautiously to remove the calculus from the denture</p> <p>Note: Video of denture cleaning using ultrasonic scaler. (1:00 minute)</p> <p>Note: Review the denture cleaning in HCC program manual</p> <p>Slide # 38 Complete Over-denture</p>
1 minute	<p>VII. Complete over-denture prostheses:</p> <p>A. Purpose: Use of natural teeth or implants to stabilize the denture</p> <ul style="list-style-type: none"> 1. Help preserve bone 2. Remaining teeth or implants bear occlusal pressure 3. Improve stability and retention of denture <p>B. Types:</p> <ul style="list-style-type: none"> 1. Natural teeth retained overdenture <ul style="list-style-type: none"> a. Remaining teeth must have a healthy periodontium 	<p>Slide #39 Types of Overdentures</p>

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
2 minutes	<ul style="list-style-type: none"> b. Sometimes preserved teeth need endodontic treatment c. Tooth crowns are reduced to short rounded preparation or to the level of the gingival margin d. Amalgam or composite cover the root canal fillings 	<p>Slide #40 Care of Overdenture</p> <p>Slide#41 Dental Hygienist Considerations of Overdenture</p> <p>Note: Motivation of the patient to maintain the health of the remaining teeth is essential.</p>
1 minute	<ul style="list-style-type: none"> 2. Implant -retained overdenture <ul style="list-style-type: none"> a. Implants are generally placed on mandibular canine 3. Care for overdenture <ul style="list-style-type: none"> a. Plaque control for retain teeth or implants b. High motivation to save the remaining teeth c. Individualized hygiene care needs t be planned according to the type of overdenture d. Fluoride self-application <ul style="list-style-type: none"> I. Use overdenture as a tray II. High concentrated sodium fluoride (5000 ppm) recommended 4. Dental hygienist treatment <ul style="list-style-type: none"> a. Maintenance appointment <ul style="list-style-type: none"> I. Motivation for caring for the remaining teeth II. EIOE- patient needs to remove the over denture III. Biofilm control IV. Oral hygiene instruction V. Fluoride varnish VI. Sealant application for overdenture abutments teeth 	<p>Q: What kind of at fluoride treatment would be beneficial for natural teeth retained overdenture</p> <p>A: 5000 ppm concentrated sodium fluoride can be used.</p> <p>Note: Point out that patient’s overdenture can be used as a tray for fluoride application.</p>

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
1 minute	<p>SUMMARY: I hope you have a better understanding of how to provide quality care for a patient with dental prostheses now.</p> <p>Caring for dental prostheses is an ongoing process for the patient and dental hygienist. Educating patients on the health of tissues involved with dental prostheses and remaining teeth is essential for oral health and longevity of dental prostheses appliances. Dental hygienists must be competent in providing care and education for patients with dental prostheses. Ultimately long- lasting and well-functioning dental prostheses is a team effort of dental hygienist and educated patient. Take the information you have learned in this lecture and use it to provide quality care for your patients with dental prostheses.</p>	<p>Slide #42 Summary</p> <p>Note: Thank the learners for their attention and participation. Ask them if they have any further questions.</p> <p>Q: From our lecture today, do you feel more competent to provide dental prostheses preventive care for your patient?</p> <p>A: Answers will vary. If students have more questions, provide instruction.</p>

TIME	CRITICAL THINKING ACTIVITY:	NOTES – MEDIA – Q/A
5 minutes	<p>Case: Rosa received a new complete maxillary denture six months ago. Since then, she has been back to the office several times for adjustments. She appears to be happy with her appliance. Rosa’s previous denture was replaced after ten years. The old denture had few chipped areas, and calculus built up on molar regions. Rosa has a fixed partial denture from teeth # 21 to 19. Sophia is the office dental hygienist seeing Rosa for her prophylaxis appointment today. Sophia asked about Rosa’s home care. Rosa stated brushing two times a day and does not floss. She rinses her denture with water in the morning and night and does not like to remove the denture during sleep. Upon Sophia’s intraoral tissue examination, she noticed erythema and inflammation of mucosa covered by the denture. Lower teeth have generalized mild plaques with several areas of calculus. The gingival around the fixed prosthesis appears inflamed and red. Probing depths are between 3 mm and 4 mm. Sophia takes some intraoral pictures to educate the patient about periodontal disease and issues with mucosa under the patient’s denture.</p> <p>1. Considering the clinical appearance of the maxillary mucosa covered by the denture, identify the oral lesion and the cause. What oral hygiene recommendation should be considered?</p> <p>A: The lesion is denture stomatitis due to poor denture hygiene. Rosa needs to be advised to clean after each meal and at night. She also needs to remove her denture at night and some periods during the day for the health of the tissues covered by the denture.</p> <p>2. Considering what was noted about Rosa’s old denture, what home care needs to be emphasized regarding denture care?</p> <p>A: She needs to be educated on how to care for her denture. Cleaning her denture at night with denture cleaner and using of denture brush should be instructed. She also needs to clean her denture after each meal by rinsing them under water. Regular recall appointments for dental hygiene appointments should be recommended.</p>	<p>Slide #43 Critical Thinking Case</p>

	<p>3. Refereeing to radiograph images and intraoral images identify the type of fixed prosthesis on the mandible. Label each part of the fixed prosthesis.</p> <p>A: Dental bridge with natural teeth supported. Teeth # 19 and 21 are abutments, and the pontic is located on extracted tooth #20 region. Connectors connect the abutments to the pontic.</p> <p>4. Considering this patient's dental prostheses What would be a dental hygiene treatment plan?</p> <p>A: Dental hygiene care plan should include educational instruction for the care and biofilms control dentures, fixed dental bridges, and remaining natural teeth. EIOE, in-office denture cleaning, prophylaxis of natural teeth. fluoride application on natural teeth.</p>	
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Test Items

Objective #1. Define dental prostheses and related dental prostheses key terms.

Test Item #1: Which of the following is the correct term for a tooth or implant used to support or retain a fixed or removable prosthesis?

- a. Pontic
- b. Abutment
- c. Connector
- d. Retainer

Objective #2: Differentiate types of dental prostheses and their characteristics.

Test Item #2: Which one of the following is the dental prosthesis that is removable and replaces one or more but less than all the natural teeth?

- a. Maryland Bridge
- b. Overdenture
- c. Obturator
- d. Partial denture

Objective #3: Discuss different types of dental prosthesis cleaners and their components.

Test Item #3: The following are examples of chemical denture cleaning agents for patients' home use, **EXCEPT** one. Which one is the **EXCEPTION**?

- a. Dilute acids
- b. Alkaline peroxide
- c. Enzyme agents
- d. Sodium hypochlorite

Objective #4: Propose dental hygienist examination and treatment for patients with dental prostheses.

Test Item #4 Your patient Mr. Jason has full maxillary and mandibular overdenture. After updating the medical history, you start the dental hygiene appointment. In 4 to 5 sentences explain what treatments should be included in this recall appointment.

Objective #5. Develop an appropriate homecare plan for patients' dental prostheses.

Test Item #5 Stephanie is a new patient of your practice. Her treatment plan included the extraction of the lower molars and second premolar teeth. Three months after extraction, her partial denture was fabricated. Dr. Khan, the office dentist, delivered her lower removable partial denture prosthesis today. Dr. Khan asked Laura, the office dental hygienist, to review the partial denture homecare with

Stephanie. In 6 to 7 sentences, explain the oral hygiene instructions that Laura needs to discuss with Stephanie.

Correct Answer Key:

1. B

2. D

3. A

4. Mr. Jason's denture home care needs to be reviewed to ensure proper cleaning. Perform EIOE. During the intraoral examination tissues covered by dentures should be evaluated. Probe around the implants and take a dental radiograph if indicated. Evaluate the health of implants. Dentures need to be examined for fitting and defects. Office denture cleaning needs to be performed. If the denture has calculus, ultrasonic can be used to remove the calculus. Implant scaling can be used for calculus removal.

5. After each meal and bedtime, the appliance needs to be removed, and both the appliance and natural teeth need to be cleaned. When removing the partial, avoid grasping the clasps to prevent damage or bend. Place some towels in the sink to prevent breakage should the appliance be dropped. Use a clasp brush to remove the dental biofilm. A denture brush can be used to clean the rest of the surfaces. Avoid using the same brush that is being used on natural teeth. Avoid using harsh toothpaste. After biofilm removal, partial denture can be immersed in the recommended cleaning solution. Avoid cleaning agents known to corrode or discolor. Exam the partial for defects regularly.