



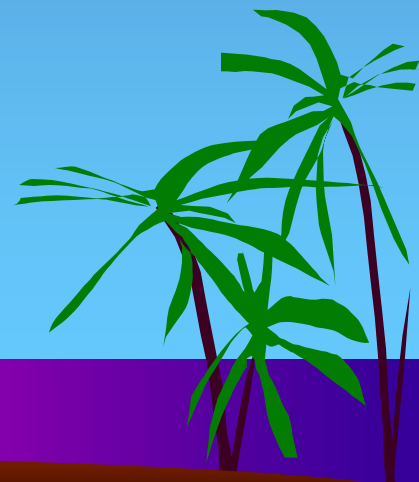
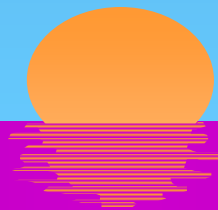
# ”Dental Restaurations.” Prosthetic Dentistry

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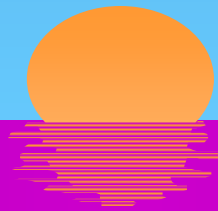
# The Role of the Teeth

- Mastication
- Speech
- Esthetics



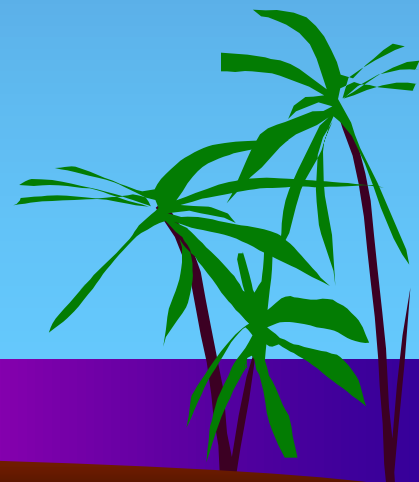
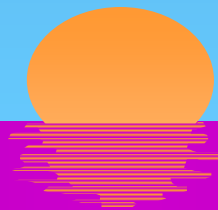
# Defects Caused by Edentulousness

- Reduction of the chewing capacity
- Disturbances in the speech
- Esthetic problems
- Pathological movement of the teeth
- Overloading of the teeth
- Extension of the tongue



# Reduction of the Chewing Capacity

- The loss of premolar or molar teeth reduces the effectivity of mastication
- The loss of front teeth makes the biting difficult



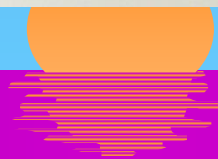
# Speech (Fonation) Disturbances

- Formation of certain consonants can be affected, depending on the location of the edentulous area

–‘f’, ‘s’, ‘sh’, ‘z’, ‘t’



# Extension of the Tongue



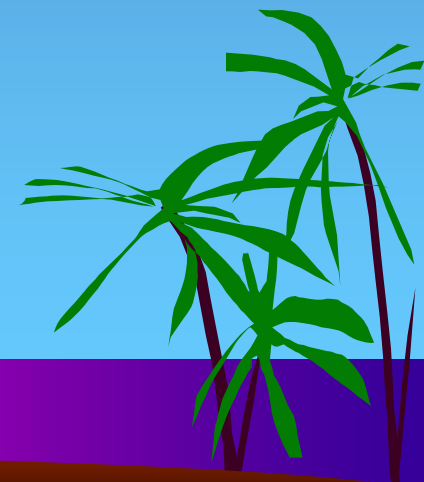
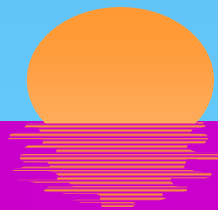
# Unfavorable Esthetics

- Edentulousness
- Upset face harmony



# Pathological Shift of the Remaining Teeth

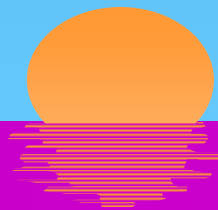
- Tilting
- Overeruption
- Torsion
- Bodily shift



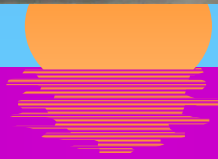
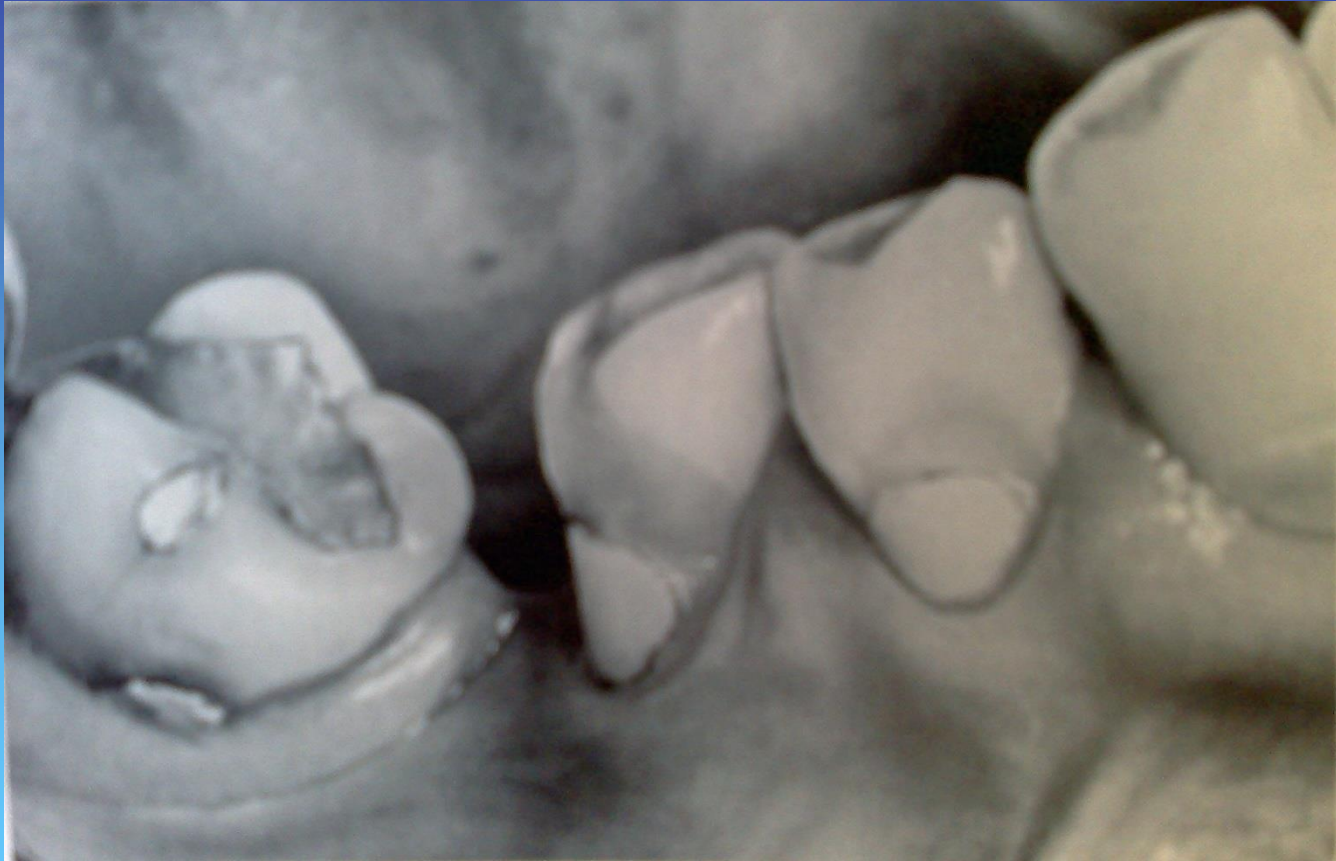


# Consequences of the Pathological Tooth Shift

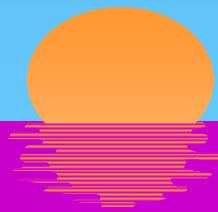
- ❑ Loss of the contact point
- ❑ Unfavorable direction of the occlusal load
- ❑ Periodontal disease
- ❑ Overloading of the remaining teeth



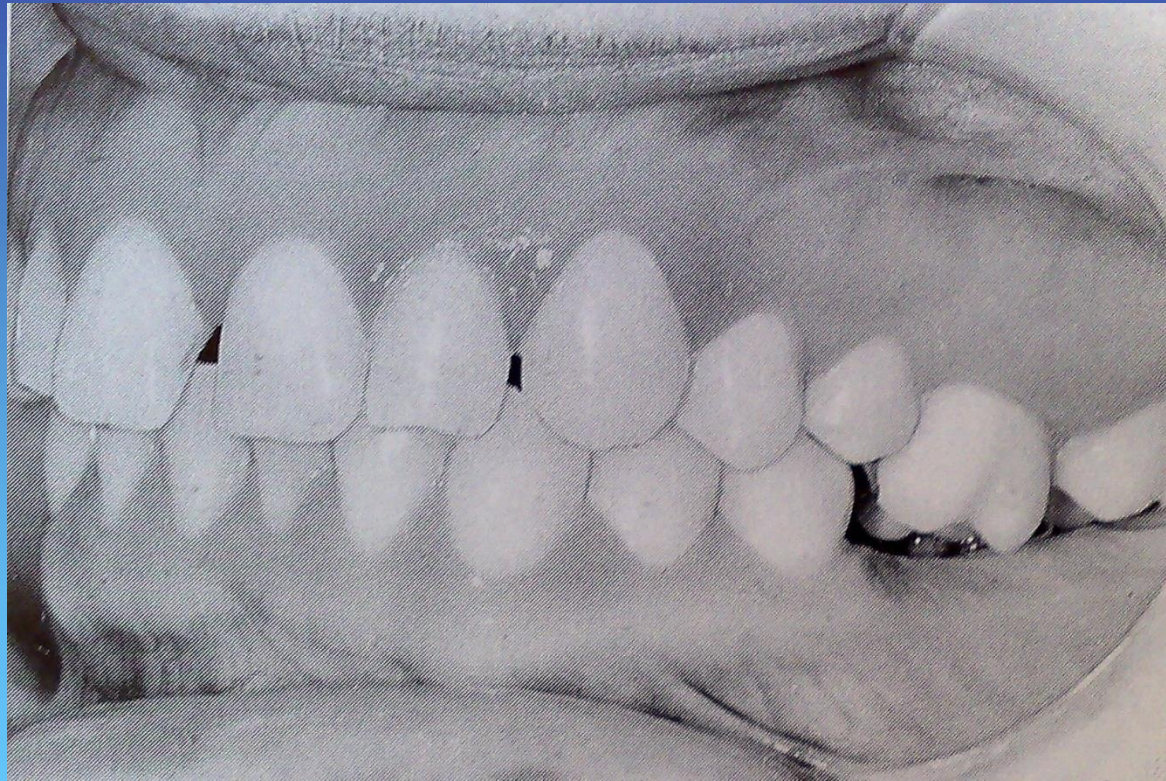
# Tilting



# Tilting

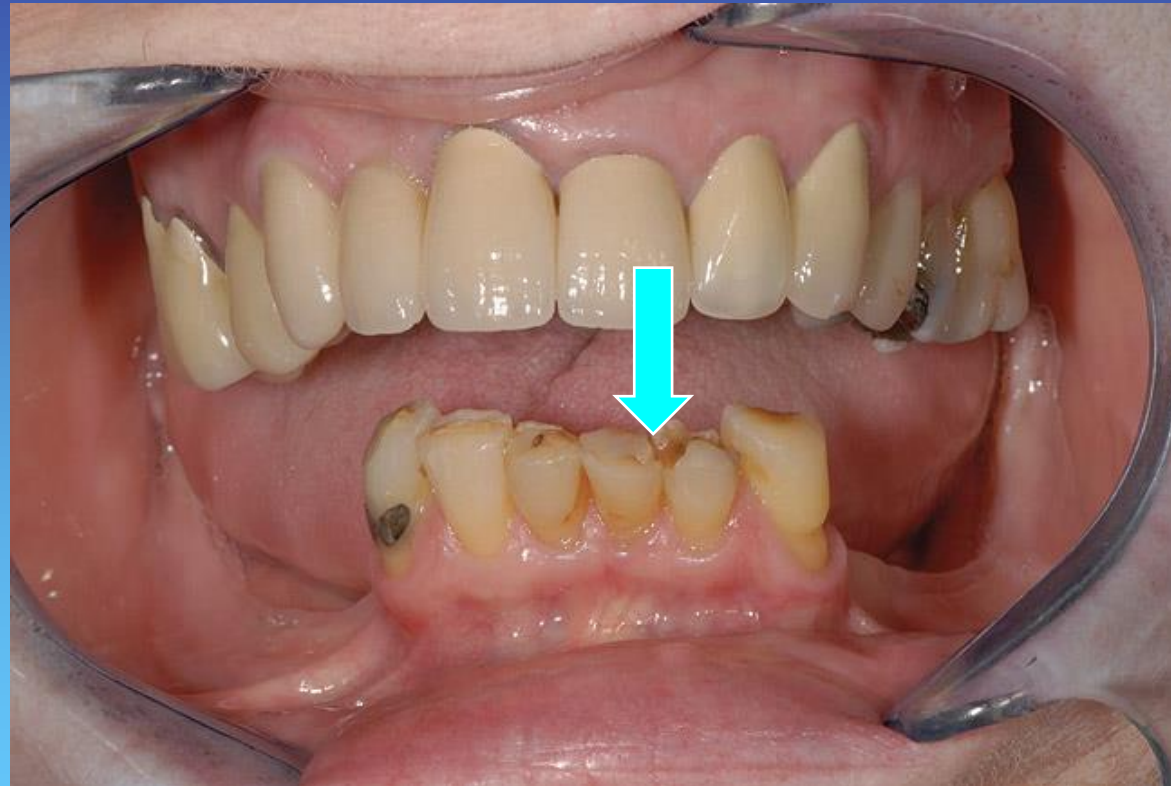


# Decreased occlusal vertical dimension due to the loss of the posterior teeth

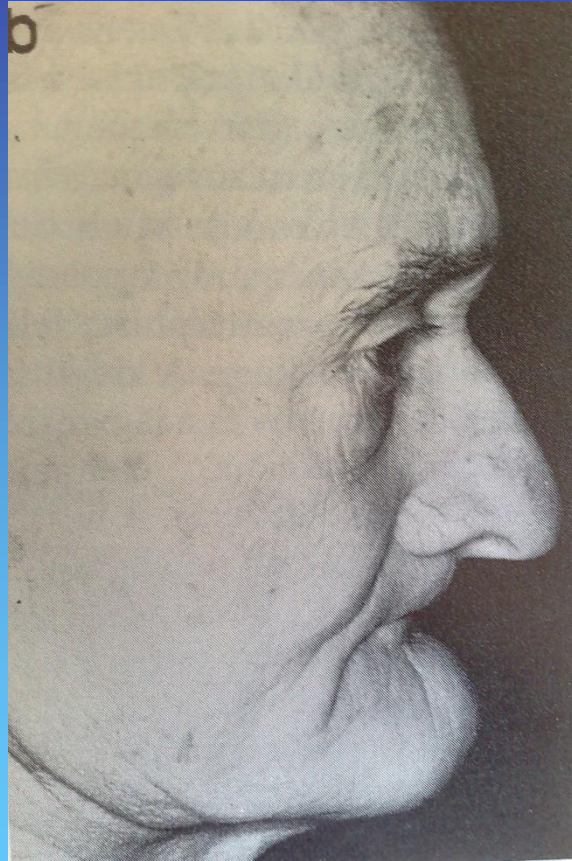


Overeruption of the antagonistic teeth

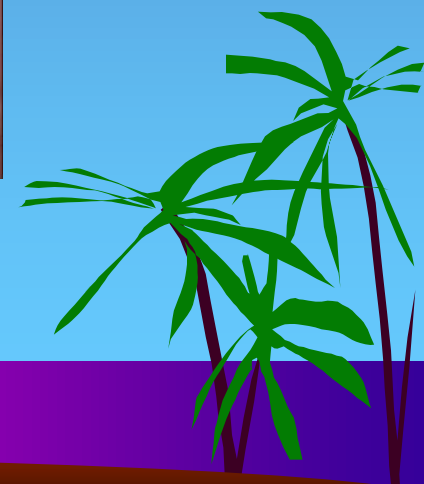
# Overloading of the anterior teeth. Wear



# Upset face harmony

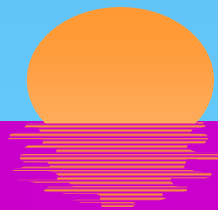


# Overeruption



# Roles Of the Prosthetic Appliances

- Restoration
- Prevention

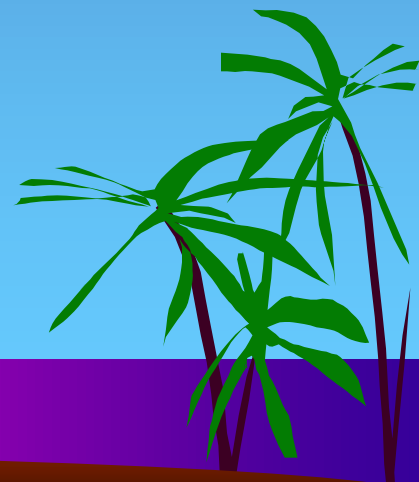
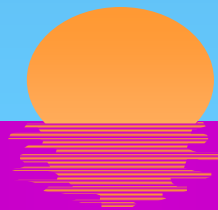




# Roles of the Prosthetic Appliances

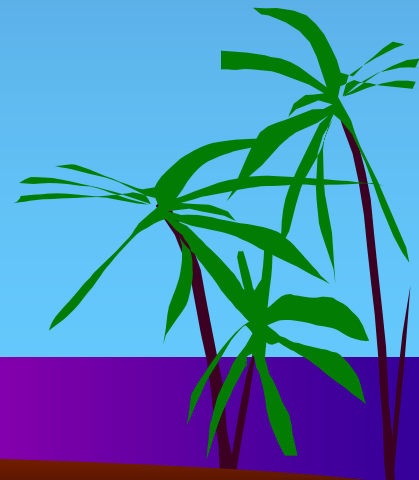
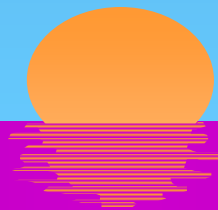
## □ Restoration

- Rehabilitation of the chewing capacity
- Treatment of the speech disorder
- Esthetic rehabilitation



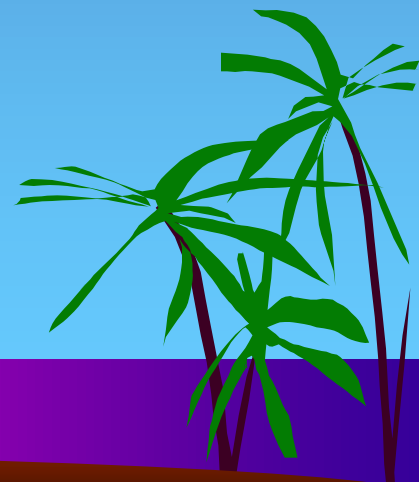
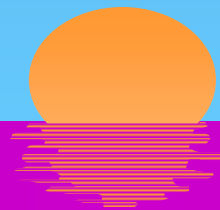
# Roles of the Prosthetic Appliances

- Prevention of further disorders
  - Overeruption of the antagonistic teeth
  - Tilting of the neighbouring teeth
  - Overloading of the remaining teeth



# Types of the Prosthetic Appliances

- Fixed
- Removable



# Steps of Making a Prosthetic Appliance in General

## □ Clinical phases

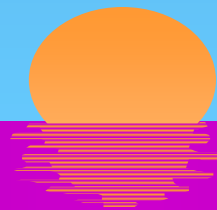
- History, examination
- Preparation of the mouth/  
tooth
- Impression taking,  
registration of the  
maxillomandibular  
relationships
- Insertion
- Control

Information  
transfer



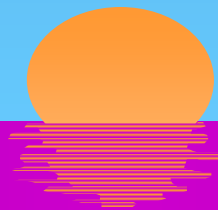
## □ Laboratory phases

- Model casting, articulator  
mounting
- Making of the appliance



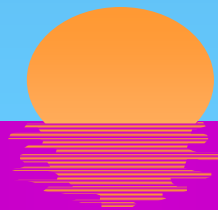
# Impression Taking Procedure

- Creating the negative likeness of the jaws
- Technician obtains the positive likeness by casting the impression



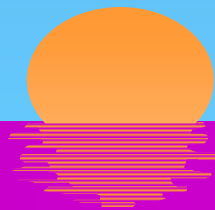
# Fixed Restorations

- Inlays
- Onlays
- Solo crowns
- Fixed bridges
- Fixed splints
- Dowelcore

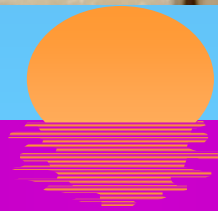


# Inlay and Onlay

- An **inlay** is similar to a filling and positioned inside the cusp tips of the tooth. They are custom-made to fit the prepared cavity and are then cemented into place.
- An **onlay** is a more extensive reconstruction that covers one or more cusps of a tooth.



# Composite inlay bridge

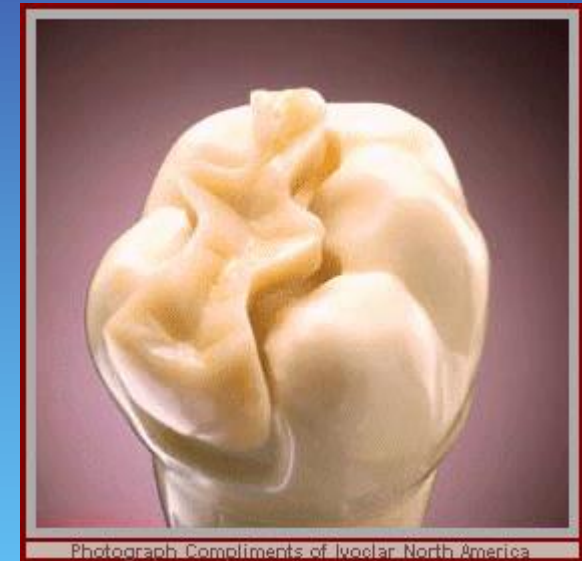




# Preparation of Inlays and Onlays

Inlays and onlays are applied in two dental visits

- At the first visit, the old filling, or decay, is removed, and the tooth is prepared for the **inlay** / onlay.
  - The dentist will then take an impression of the tooth, and send this impression to a **dental** laboratory. This impression will be used by the laboratory to construct a custom-made porcelain, or gold **inlay** / onlay.
- At the second visit dentist cements the inlay into the tooth



Before:



After:



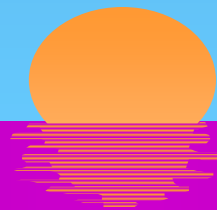
# Solo Crowns

- Dental crowns, are dental restorations which encase a tooth and are cemented in place.
- Aims of making a crown:
  - Restoration of a destructed tooth
  - Esthetic reason
  - Clasp holding (for a removable appliance)



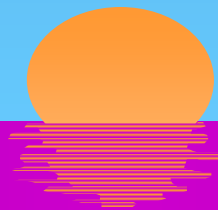
# Solo Crown

- Tooth is prepared by the dentist
- Crown is made by the technician



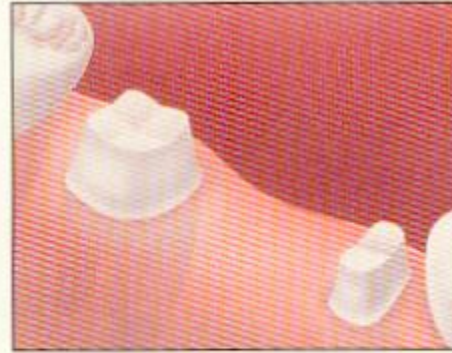
# Bridge

- A dental **bridge**, otherwise known as a fixed partial denture, is a prosthesis used to replace missing teeth and is not removable by the patient

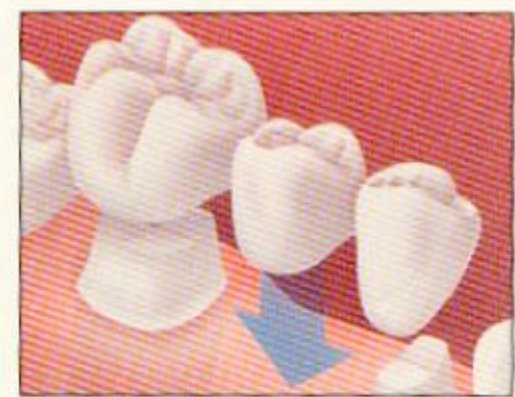


# Bridge

- Preparation of the abutment teeth is done by the dentist
- Impression is taken of the prepared jaw
- Appliance is made by the dental technician according to the impression



*To replace a missing tooth with a conventional three-unit bridge, teeth adjacent to the gap are prepared.*



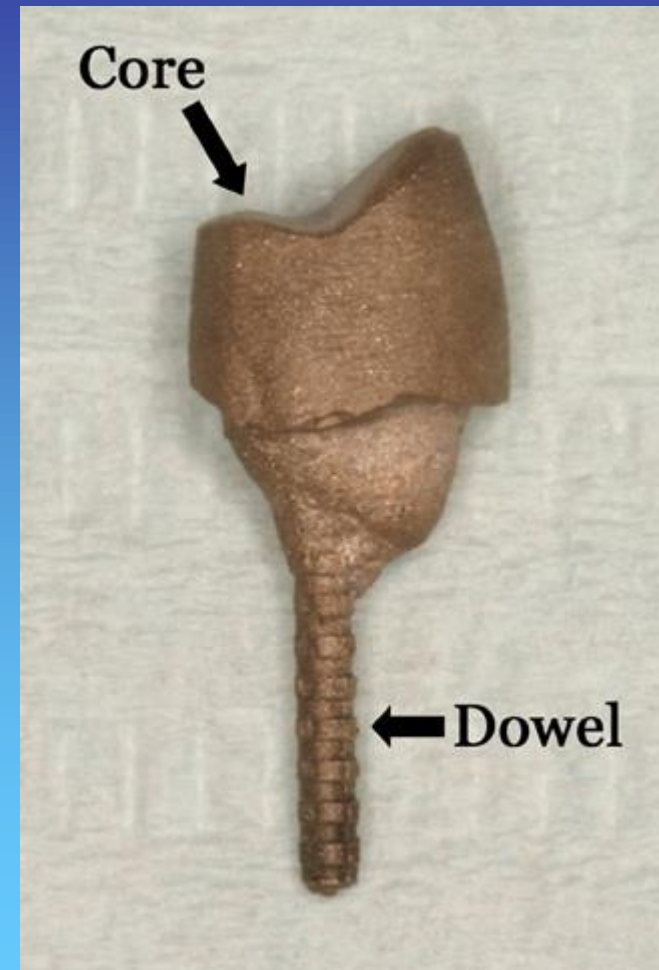
*The custom-made bridge is fitted and adjusted.*

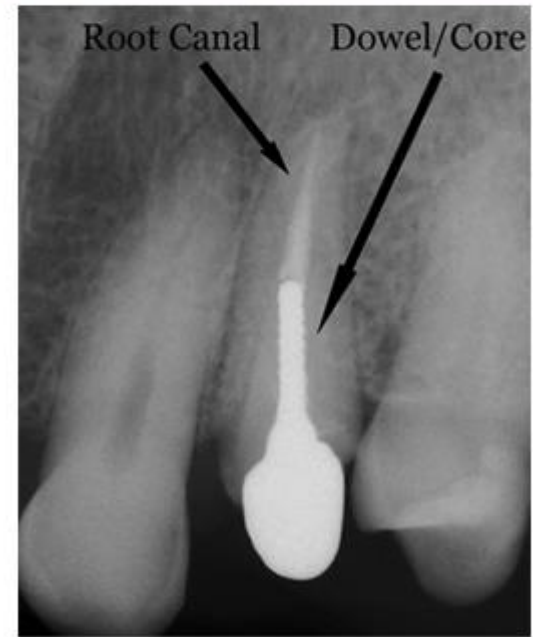
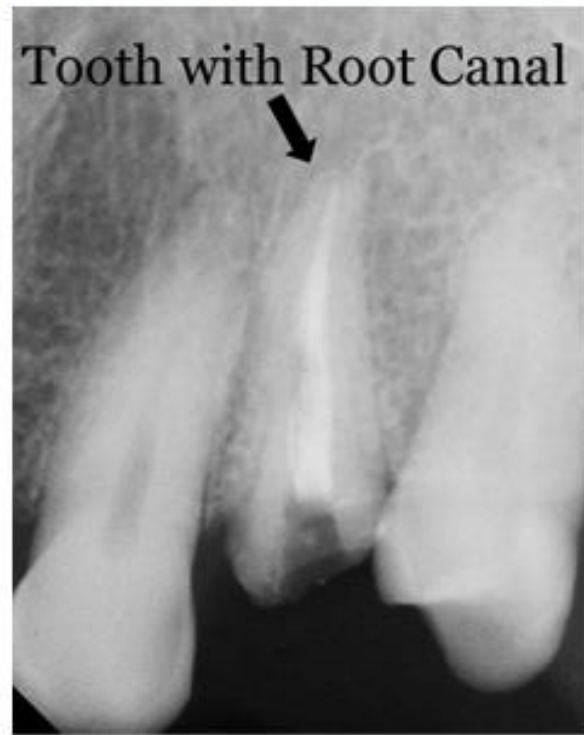
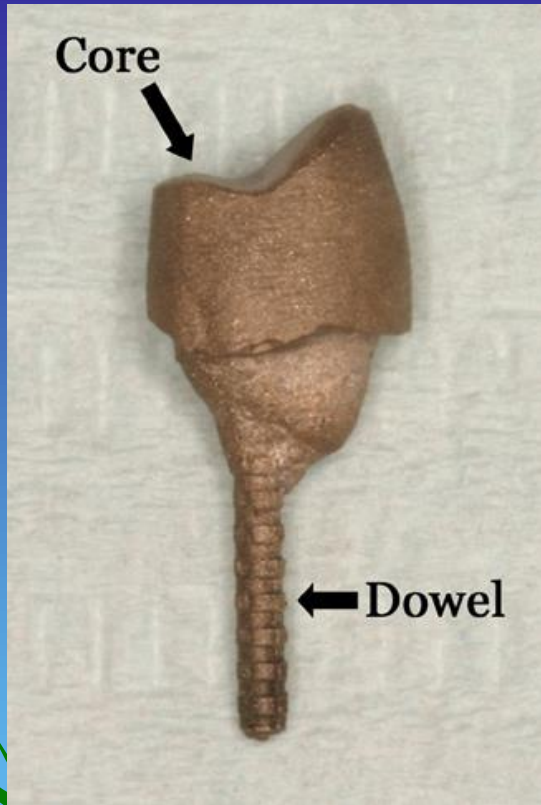


*After adjustments are made, the bridge is cemented into place.*

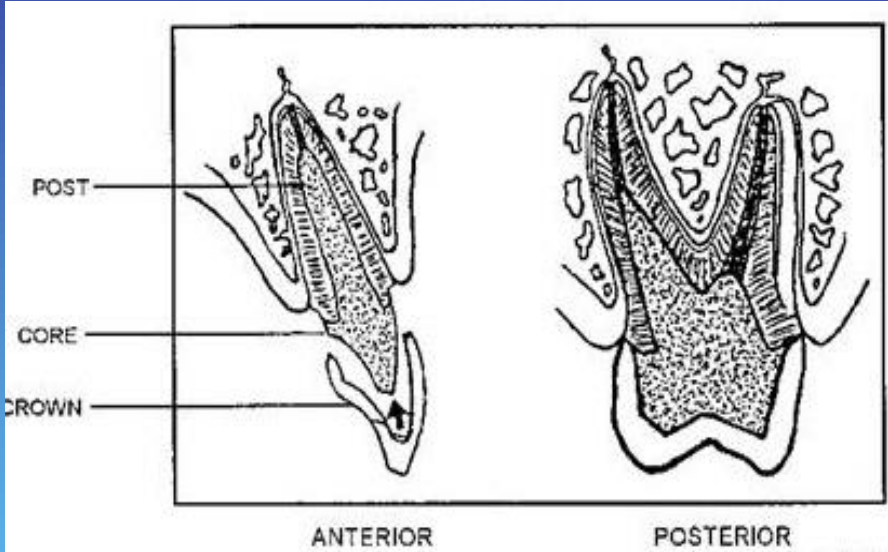
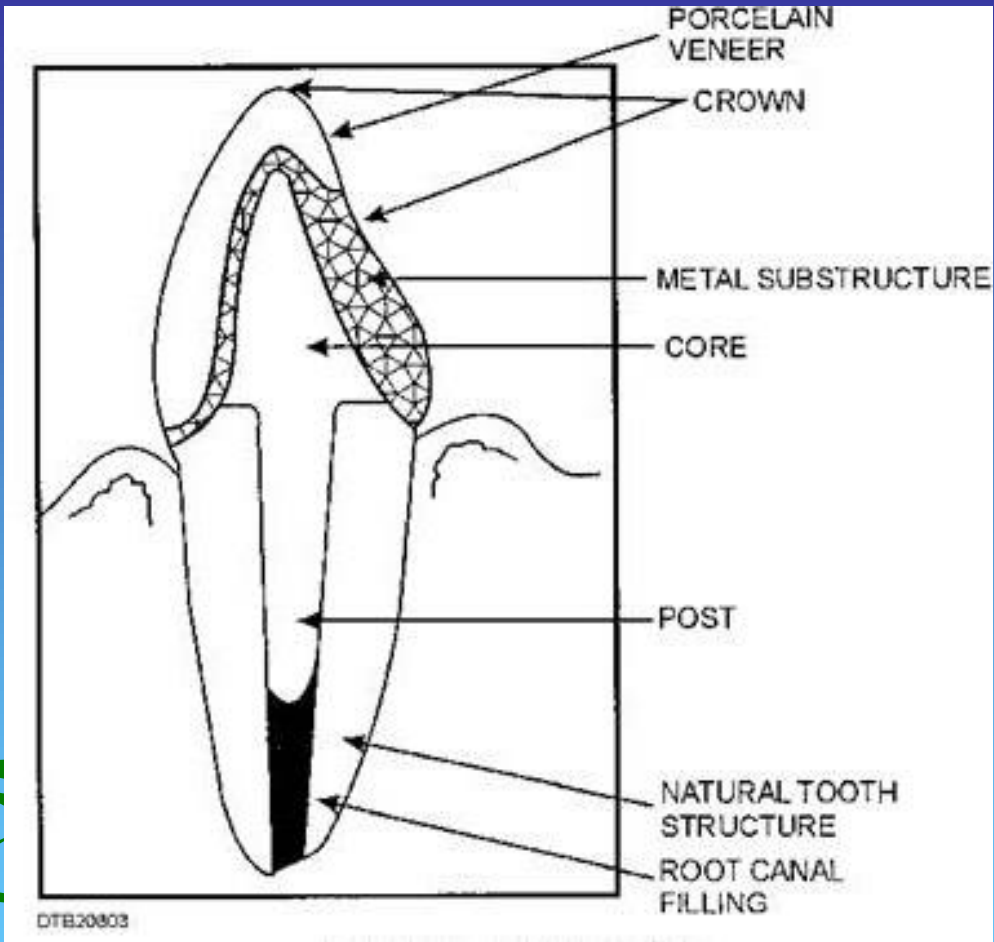
# Post and Core or Dowelcore

- Also known as dowel and cores, these are cemented restorations used to support a **crown** or a **bridge** when there is not enough natural tooth structure to do so
- The dowel is the post-like portion of this restoration. It is a structure that is inserted within the body of the root of a tooth that has had a previous **root canal therapy**.
- The core portion of this restoration is the part that supports the **crown** or **bridge**. It is the part that can be seen after cementation of a dowel and core.



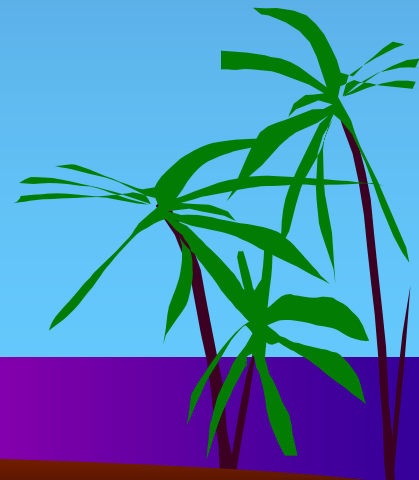
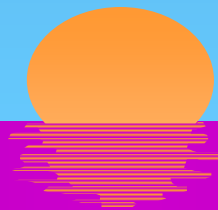






# Removable dental appliances

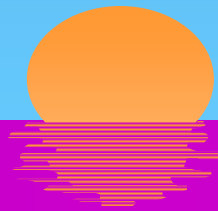
- Removable partial denture
- Complex partial denture (fixed+ removable)
- Overdenture
- Complete denture



# Removable Partial Denture

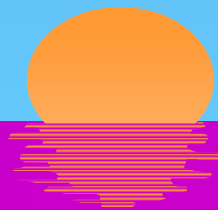


RPD can be inserted and removed from the mouth by the wearer, without the destruction of the appliance



# Removable Partial Denture

- Impression is taken by the dentist of the denture bearing jaw
- Appliance is made by the technician



# Complex Partial Dentures

- Fixed appliance
- +
- Removable appliance retained on the fixed part



# Complex Partial Dentures

- Telescop retained complex partial denture



# Complex Partial Dentures

- Bar joint attachments



# Overdenture

- A complete denture that is supported by both soft tissue and natural teeth that have been altered so as to permit the denture to fit over them.
- The altered teeth may have been fitted with short or long copings, locking devices, or connecting bars.





# Complete Denture

- Complete denture replaces all of the teeth in either the upper or the lower jaw
- Impression is taken by the dentist
- Appliance is made by the technician

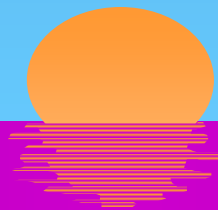
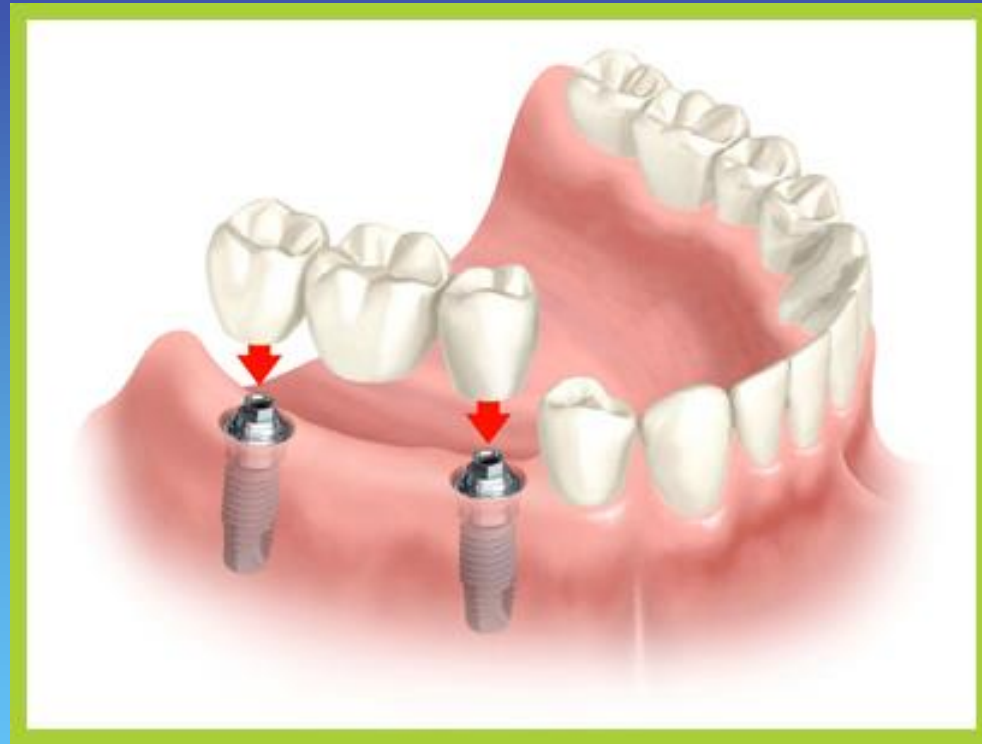


# Implant Supported Prosthetic Appliance

- Removable appliance



# Implant retained fixed bridge



Thank you for your attention!  
Please evaluate the lecture and me!

