



Partial Denture

Repairing of acrylic P.D

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Lecture 9

Repair:

Mean the process of correction or elimination the defect that had been occurred to components of partial denture.

**Types of fractures**

- 1- Broken clasp arm
- 2- Loss or fracture of acrylic teeth (artificial teeth)
 - A) Anterior teeth
 - B) Posterior teeth
- 3- Acrylic resin fracture :-
 - A) Midline fracture
 - B) Fracture denture into two or more parts
 - C) Fracture denture with section “S” missing

□ Broken clasp arm occurred as a result of careless use of contouring pliers.

Loss or fracture of acrylic teeth (artificial teeth)**Anterior teeth fracture:**

Occasionally lack of bonding between the denture base resin and tooth allows the plastic tooth to be dislodged from the denture .this can occur because of:

- a. Wax is not removed thoroughly from the teeth before packing.
- b. Tin foil substitute placed on the ridge laps of teeth is not removed prior to packing

Posterior teeth fracture:

If the missing teeth are posterior we need to fix the teeth on an articulator to facilitate correction of occlusion

Midline fracture

Procedure for repairing midline fracture:

- 1- The broken edges are cleaned from debris and other interferences so the two parts will fit together well.
- 2- The two halves are held together by means of an old bar which was lured to the teeth and resin surface by means of sticky wax .No wax is placed over the fracture so that the tissue and palatal side of the fracture can be examined to see that they are in correct position
- 3- Tin foil is adapted to the basal surface of the denture before a plaster cast is poured inside the denture.
- 4- Plaster is vibrated gently onto the palatal side to prevent air bubbles and then set on the balance of the mix to form the cast.
- 5- The cast is removed from the denture and resin on both side of the break is cut away and beveled.
- 6- The cast is replaced, acrylic monomer resin is painted on the cut surface and a cold cure repair is placed in the break.
- 7- The area should be slightly over filled to allow for finishing

Fracture denture into two or more parts:

- 1- Examine the denture to determine that all pieces are present
- 2- Assemble the individual pieces carefully and lute them together with sticky wax.
- 3- Pour stone cast into the reassembled denture.
- 4- After the cast has set remove the denture and groove dovetail into all piece or we can use wire for reinforcement to strengthen the repair if desired.

- 5- Moisten the margin with monomer. Before painting the repair resin paint tin foil substitute on the cast and allow to dry.
- 6- Relapse the denture on the cast and carefully put the auto polymerizing resin into each groove and dovetail.
- 7- Secure the denture to the cast with plaster or rubber band and cure at pressure container of warm water for 30minuts at 20psi.
- 8- Remove the denture from the cast. finishing arid polishing

Fracture denture with section "s" missing:

Such fracture will require the dentist to take an impression to make a cast specially when the flanges are bracken and lost Auto polymerizing resin is then painted on the cast to replace the missing portion