\*\*repair of RPD:

-rarely happened.

-the prevention always better than curing so from the first step we should take our time at treatment and designing for the RPD because we will have forces that may do stress and causing deflection and breakage sometimes to the RPD’s components.

-we should consider the depth of the undercuts and which material to choose. i.e.: deep undercut we can’t use cobalt --🡪breakage or permanent deflection.

-so if we have problem we have retain back to our design otherwise it will be from mishandling from the pt.

-always take ur take time doing the design, surveying and preparation, for example: when doing the rest we have to reduce the marginal ridge height and deepen the center of the prep gradually to let the force to go to the center of the tooth .another example: if we don’t do the adequate prep for the metal the rest will be thin 🡪breakage.

-ensure that ur pt can deal with his denture at insertion and removing.

Problems that we may face:

-the most common problem that we face is broken clasp because of deflection beyond its limit (fatigue overtime 🡪 1-breakage that because of deep undercuts.

We eliminate this problem by doing proper surveying (depth of undercuts and the suitable material to them)

-cobalt🡪0.25

-stainless steel 🡪0.5

-gold🡪0.75

2- Or it may because of structural failure which means the uniform of the clasp; we know clasp should be in a uniform thickness from the origin and at the body then tapering toward the retentive tip so any wrong with that will lead to the breakage.

3-mishandling from the pt:

We should instruct the pt not to remove the denture from clasps he should release the denture from flanges.

\*\*how to fix it:

1. Wrought wire: which is a ready flexible wire we put it in the acrylic by doing a tunnel in the acrylic then we put the wire then cover it by acrylic then we adapt it to the tooth then we make a pickup impression (which is the impression with the denture in its place) then we pour it then we put the denture on the cast and do the adjustment and you don’t need the pt to attend.
2. Expose the metal then soldering a ready clasp that already casted just it needs adjustments to the tooth then solder it to the metal bar itself then cover it by acrylic.

Fractured rest:

-rarely to happened.

-due to an inadequate preparation.

Most common site to fracture from is at the junction to the minor connector (not enough bulk of the material).

How to fix it:

1. Check ur the preparation if it’s in an adequate depth. If not then does it well.
2. Pickup impression and we add platinum foil at the site where to put the rest.
3. Then we put solder material (gold solder).

We put the platinum foil just to not put the solder material directly to the gypsum product.

1. Soldering it with the rest of the assembly.

Distortion of the minor or major connector:

In most o0f the cases we consider doing a new denture because the fixation procedure very difficult and has high source of errors in addition to its cost which is the same as doing a new one.

\*to avoid this problem:

-adequate bulk because these components should be rigid

-over adjustment 🡪when these component compress tissues underlying we adjust it away from tissue and time by time it will weaken the minor and major connector🡪breakage.

\*\*if it minor distortion: we have to relocate it by make an impression and locate it away from undesirable forces and then solder it again. But we have considered that it may relapse again.

Loss of the tooth or teeth not involve in support (not an abutment):

Extraction due to caries or periodontal problem here we can solve this problem by adding a metal to the major connector then cover it with acrylic.

We add a hook like to hold the acrylic (mechanical mean).

Loss of the abutment tooth:

So here we have to check the adjacent tooth if it is suitable for abutment and then we do a preparation that matches the origin path of insertion and removal of the denture so we have to do surveying again which is the difference between losing an abutment or another tooth.

Acrylic separation:

There are some problem that don’t have a fixed rule to deal with the dentist and the technician can create a way to deal with it

How to fix this problem:

1. Return back the piece of the acrylic in its place.
2. Then we make an index by silicon around the teeth and the place of separation
3. Then we remove the acrylic that separate.
4. So we will have the RPD with the index then we have to refill the index with cold cure acrylic by brushing technique by adding an increment.

Repairing by soldering:

80% of the soldering is electrical soldering its available at the lab and it can be used close to the acrylic resin without removing the base because it gives rapid localization heat so we put a protective liner at the acrylic then we start soldering .

Relining and rebasing:

Relining: when we have a fitting surface problem we check for that by pressing the prostheses it will sink.

How to do relining: we use the denture as a try and we do border molding.

Tow technique to do that:

1-closed mouth technique:

I put the material and let the pt to bite on until it sets .its advantage that the vertical dimension will not change.

2-open mouth technique: the dentist holds the denture but we should check for vertical dimension.

Materials to choose;

We can use zinc oxide or silicon

Conditioner materials can be used in special technique which is functional impression: the pt goes home with this impression and then came back to the clinic next day here the impression will take all functional movement.

Rebasing; the dr. herself does not believe in this technique because the chance to make errors is high and the coast will be the same as doing a new one.

Finally we have to make sure when doing that technique doing it on healthy tissue.

Good luck,

Sura H.khraisat