

Simple Technique to Increase The VRO of Existing Dentures without Altering them Permanently

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Case Presentation

A female aged 84 years completely edentulous with the history of wearing present set of U/L complete dentures of 10 years reported to clinic having C/O inability to chew from many months & slight pain in TMJ since 6 months.

Clinical Examination

Systemic : No significant history of any systemic disorder except aging & mostly confined to bed.

Oral

- U/L highly resorbed ridges
- No indications of immediate trauma on the U/L ridges from dentures
- U/L loose & unstable denture which were worn off & 10 years old.(Fig. 1)
- The IOG was found to be 9 mm.
- The right and left TMJ were slightly tender on palpation.
- Patient also had history of having a set of U/L new denture made 6 months back somewhere but did not used because they were too high.
- Patient has not been able to close the jaw in one position of centric relation.
- She had a tendency to slide the jaw after closing it in centric relation

Diagnosis & Treatment Planning

- Patient requires a new set of U/L CD of proper VRO to make her enable to chew properly.
- With 0 degree teeth and provide freedom in centric.
- The VRO has to be increased gradually so that patient can accommodate the new VRO.

Patient did not want to alter the existing denture at all because she was apprehensive if the new denture did not adjust then she would be losing the existing denture. So the existing denture could not be used as transitional denture.

So to increase the VRO gradually, we should be making more than one set of U/L CD but that would increase the cost.

So an intermediate removable appliance was planned which could be snapped over the existing dentures.

Procedure

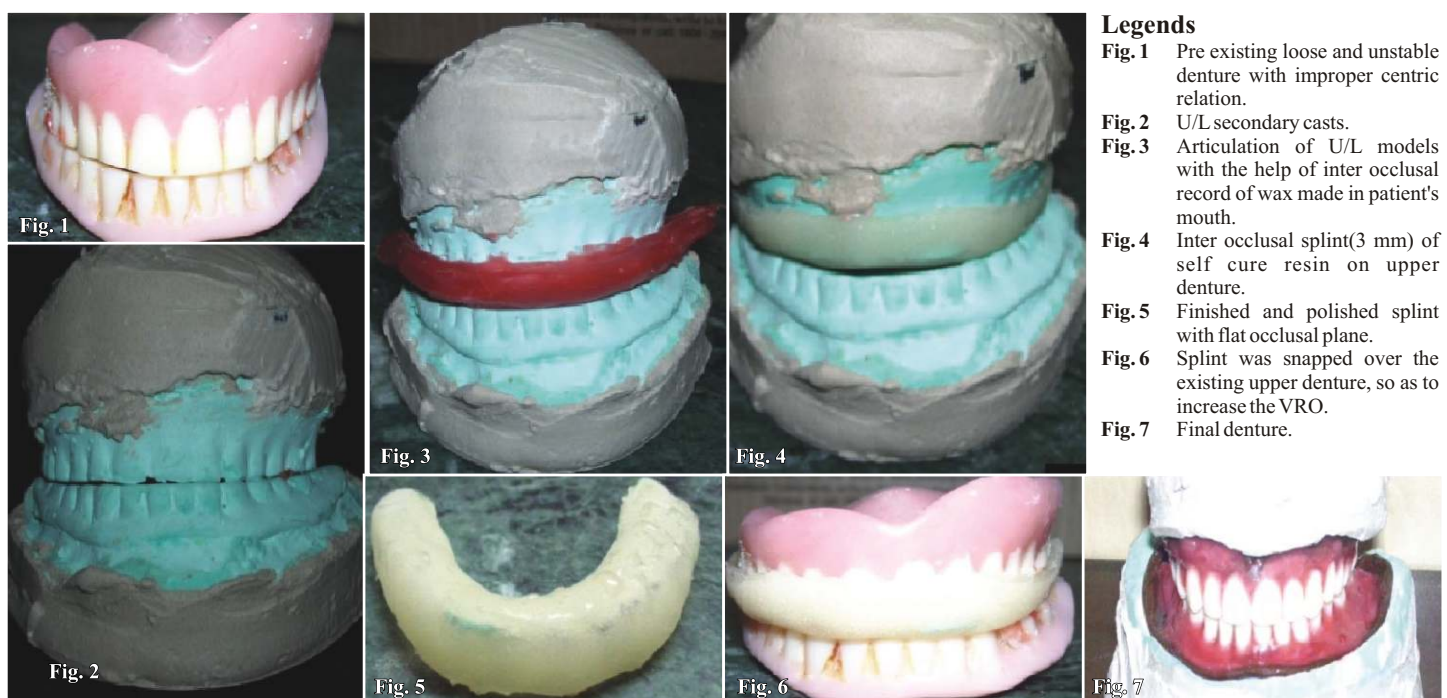
- Alginate impressions of U/L denture were made and U/L casts were made in dental stone type II.(Fig. 2)
- Inter occlusal record for CR was made in patient's mouth in wax.
- U/L models were articulated with help of inter occlusal record. (Fig. 3)

- Inter occlusal splint of 3 mm thickness was made in self cure on upper denture and flat occlusal plane was provided to increase the VRO by 3 mm. (Fig. 4)
- The splint was finished and polished (Fig. 5),and snapped on the existing upper denture.(Fig. 6)
- The denture was delivered to the patient for use. (Fig. 7)

When patient had comfortably accommodated the new VRO that is 3 weeks a new set of U/L CD made with further increase in VRO of 3mm

References

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Legends

- Fig. 1** Pre existing loose and unstable denture with improper centric relation.
- Fig. 2** U/L secondary casts.
- Fig. 3** Articulation of U/L models with the help of inter occlusal record of wax made in patient's mouth.
- Fig. 4** Inter occlusal splint(3 mm) of self cure resin on upper denture.
- Fig. 5** Finished and polished splint with flat occlusal plane.
- Fig. 6** Splint was snapped over the existing upper denture, so as to increase the VRO.
- Fig. 7** Final denture.