

Post insertion problems in complete denture

Loss of natural teeth & subsequent alveolar resorption has a significant impact on appearance & function. CD fabrication techniques, & placement of a CD are not the final steps in the treatment of a dentulous patients & patient's visit to the dentist continues long after that.

Post insertion problem classification:

١. Problem related to soft tissue.
٢. Problem related to function.
٣. Problem related to aesthetic.
٤. Problem related to phonetic.

Problem related to soft tissue		
Sore spots- mandible		
Complains/area	Causes	Treatments
Peripheral areas	١. Over extension	Adjust denture accordingly
	٢. Unpolished or sharp edge	Polish denture borders
	٣. herpetic or aphthous ulcer	Leave denture out as much as possible & wait ٧-١٠ days.
Crest of ridge	١. bone spicules.	Identify the area in denture with PIP & provide relief over spicule &/or surgically remove spicule.
	٢. spinous ridge crest	Provide relief in the denture.
	٣. pressure spots at time of impression.	Use PIP or indelible pencil to determine the areas & adjust accordingly
	٤. occlusal prematurities.	Correct occlusal defects, recheck vertical dimension & clinical remount.
Side of ridge- anterior area	١. over extension	Use PIP & adjust border involved
	٢. maximum intercuspation not in harmony with centric relation (CR)	Enlarge centric area; grind mesial inclined planes of maxillary teeth & distal inclined planes of mandibular teeth using a clinical remount.

Side of ridge-bicuspid area	1. lingual tori (nonyielding areas)	Provide adequate relief in denture base.
	2. pressure spots at time of impression	Adjust denture accordingly.
	3. shrinkage of denture during processing	Rebase denture
	4. errors in occlusion- occlusal prematurities.	Check occlusion on the opposite side of arch from the sore spot.
	5. pressure on mental foramen if ridge is greatly resorbed.	Provide adequate relief.
Under lingual flange	Maximum intercuspation not in harmony with CR (drives mandibular denture forward)	Enlarge centric area & adjust local area.
Under labial flange	1. excessive overbite	Adjust anterior occlusion
	2. habit-mastication in protrusive relation.	Train patient to masticate in centric.
Generalized soreness & redness	1. heavy biting force-strong musculature.	Reduce buccolingual width of teeth; reduce VD; use soft lining if necessary
	2. excessive OVD	Reduce VD
	3. locked occlusion	Enlarge centric area.
	4. failure to provide freedom for Bennett movement (soreness usually on working side).	Reduce cusps to a non-anatomic plane or reset teeth.
	5. Improperly processed base materials	Rebase denture.
Sore spots- maxilla		
Complains/area	Causes	Treatments
Peripheral areas	1. Over extension	Adjust denture accordingly
	2. Unpolished or sharp edge	Polish denture borders
	3. herpetic or aphthous ulcer	Leave denture out as much as possible & wait 7-10 days.
Maxillary frenum	Over extension	Open a V-shaped notch for the labial frenum & widen the buccal frenum area
Posterior border of denture	Sharp edge at the post dam area	Adjust sharp edge slightly without reducing dam area
Midline of denture	Prominent mid suture or torus maxillaries	Provide some relief over the area
Generalize discomfort		

1.improper occlusion	Correct occlusion (clinical reline)	
2.maximum intercuspation not in harmony with CR	Enlarge centric area(clinical reline)	
3.excessive OVD	Reduce VD(clinical reline)	
Burning sensation		
Maxillary anterior hard palate &ant. alveolar ridge area	Pressure on anterior palatine foramen	Relief area over foramen
Maxillary bicuspid area or molar tuberosity	Pressure on posterior palatine foramen	Relief area over foramen
Mandibular anterior region	Pressure on mental foramen	Relief area over foramen
Generalized	Improperly processed	Reline denture; replace as much as possible base material with new acrylic
Tongue	Allergic reaction/xerostomia	Treated according to the cause
Redness		
Fiery redness-all tissue contacted by denture including tongue &cheeks	Denture base allergy (very unusual)	Remake denture and use all metal base (after allergy test).
Bearing tissues	Ill-fitting denture, avitaminosis	Remake or rebase dentures. Employ vitamin therapy regimen.
Tongue &cheek biting		
Thin or under extended periphery (base material does not provide enough support for the cheek)	Build out thin areas, or extend the short periphery.	
Insufficient inter-arch clearance between distal parts of denture base.	Thin maxillary denture over tuberosity; if more space is required, remove it from the retromolar area of the mandibular denture.	
Inadequate amount of horizontal overlap in molar region.	Re-contour buccal surface of mandibular molars &bicuspid; eliminate the tight contact of the max. buccal cusps on the mand. buccal surface.	
Pain in TMJ		
Insufficient OVD	Increase OVD	
maximum intercuspation not in harmony with CR	Make new occlusal record, regrind &remount occlusion.	
Arthritis	Treat with analgesic	
Trauma	Treat with analgesic	
Gagging		

Immediately upon insertion	1. max. denture over extended or too thick in posterior border.		Adjust denture or thin posterior border.
	2. lack of retention		Reline denture.
	3. Mand. denture too thick in distolingual flange.		Reduce thickness or distolingual flange.
Delay (2 weeks-2 months after insertion)	1. incomplete border seal allowing saliva under denture.		Increase border seal with self-curing acrylic resin (possibly at the posterior palatal border)
	Improper occlusion causing denture to loosen & allowing saliva under denture.		Correct occlusion (clinical remount).
Deafness			
Excessive OVD		Reduce OVD	
Fatigue of the muscles of mastication			
Excessive OVD		Reduce OVD	
Insufficient OVD		Increase OVD	
Problems related to function			
Instability			
Complains/area	Causes		Treatments
Looseness of mandibular denture	1. errors in occlusion (maximum intercuspation not in harmony with CR)		Correct faulty occlusion by remount & grind procedure.
	2. occlusion plane too high		Reset teeth at a lower plane.
	3. under extension of periphery (inadequate impression).		Rebase denture providing proper extension.
	4. inability of patient to master denture.		Use denture adhesives to help develop skill in handling denture (for a short time only).
	5. Tongue position (retracted tongue)		corrected by having patients train themselves to place their tongue over the groove on the lingual surface of the denture
Looseness of maxillary denture	Occasionally	under extension in some area	Correct with self-curing acrylic resin; first check with compound for diagnostic purpose.
		Faulty occlusion	Correct occlusion
		Overextension of peripheries	Adjust denture accordingly.
		Dehydration of	Remove the cause.

		tissue due to alcoholism	
		Displacement of flabby tissues when making impression	Correct surgically; modify impression technique to change primary denture stress-bearing area to the buccal shelf.
When eating on either sides		Nonyielding area in hard palate (ridge tissue yields under chewing stresses; denture rocks on hard area).	Provide relief chamber over non yielding area.
		Incorrect tooth position (teeth may be set too far buccally off ridge).	Rebalance in lateral excursions; reset teeth where nature should have had them.
		Chewing resistant food	Instruct patient to maintain soft diet until mouth is conditioned to wearing denture.
Approximately every 3 hours		Heavy mucinous saliva	Prescribe astringent mouth washes & regular scrubbing of denture; reduction of carbohydrate.
		Incorrect tooth position (teeth may be set too far buccally & labially)	Correct surgically; change primary denture stress-bearing area to the buccal shelf.
		Improper incising habits	Train patient to masticate in CR.
When yawning or opening wide		Denture base too thick in buccal posterior area, coronoid process exerts forward & downward force on posterior of denture upon opening	Reduce thickness of denture base.
		Overextended in hamular notch	Shorten denture until pterygomaxillary ligament does not exert tension on

			posterior border when mouth is opened wide.
		Inadequate PPS	Increase PPS with self-curing acrylic resin.
When talking		Inadequate PPS	Increase PPS with self-curing acrylic resin.
		Overextended in posterior region	Shorten posterior until soft palate does not lift upward & break contact with denture base
When occluding in CR		Improper occlusion	Correct occlusion
		Poor denture foundation (flabby tissues over ridge).	Correct surgically; change primary denture stress-bearing area to the buccal shelf.
		Incorrect tooth position (teeth may be set too far buccally).	Reset teeth.
		maximum intercuspation not in harmony with CR	Enlarge centric area.
		Nonyielding area in hard plate.	Provide relief in area.
Only a feeling of looseness (support & retention are present yet denture feels suspended in mouth).		Large area of non-yielding tissue in hard plate.	Provide relief chamber, adequate to permit denture to be properly seated.

Interference

When swallowing	Max. denture too thick or overextended in posterior region	Reduce thickness or adjust posterior
	Mand. denture too thick or overextended in posterior lingual flange area.	Reduce thickness or adjust posterior lingual flange area.
	Insufficient OVD	Increase VD
	Excessive OVD	Reduce VD
	Incorrect tooth position	Reset teeth

	(posterior teeth set too far lingually- tongue crowded)	
Clicking	Excessive OVD	Reduce VD
	Ill-fitting dentures	New dentures
	Overextended lower dentures	Reduce peripheral length
Problems related to esthetic		
Complains/area	Causes	Treatments
Fullness under nose	Labial flange of denture too long or too thick	Reduce length or thickness of labial flange
Depressed philtrum	Labial flange of mandibular denture too short	Increase length or thickness of labial flange
Upper lip sunken in	Max. anterior teeth set too far lingually	Reset anterior teeth labially.
Too much of the teeth are exposed	Excessive OVD	Reduce OVD
	Incisal plane too low	Reset teeth at higher plane
	Cuspids & lateral incisors too prominent	Adjust accordingly
Artificial appearance	Technique setup (teeth are too regular in alignment)	Individualize by rotating & shortening some teeth
	All teeth in same shape	Choose different but complimentary shades; use staining techniques
	Lack of individualization of teeth	Grind incisal edges & angles
	Lack of individualization of denture base	Individualize gingival contour & color of denture base.
Problems related to phonetic		
Complains/area	Cause	Treatments
Whistle on "s" sound	Air stream passes unimpeded or with inadequate impedance between the dorsal surface of the tongue & the anterior palate	Increase the palatal resin convex contours lingual to the max. central incisors to impede the air stream passing between the tongue & palate. Create rugae if necessary.
Lisp on "s" sound	The air stream passing between the tongue & the anterior palate is excessively impeded, usually by rugae or excessive resin contour	Reduce OVD until premolars no longer contact during speech.
Max. & mand. incisors or premolars contact	OVD too great	Reduce OVD until premolars no longer contact during speech.

during sibilant (s,sh,z,ch)sounds		
Clinician observes that incisal edges of max. incisors contact the lower lip \mm or more labial to the wet/dry junction of lower lip when "f" & "v" sounds are made.	Maxillary teeth may be set too far labially.	Evaluate lip support & overall appearance of ant. teeth as they are positioned. Reset to a more lingual position as needed. Incisal edge of maxillary incisors should contact the wet dry junction or just lingual to it during production of the "f" & "v" sounds.

