# COMPLETE DENTURE OCCLUSION

LEC.15

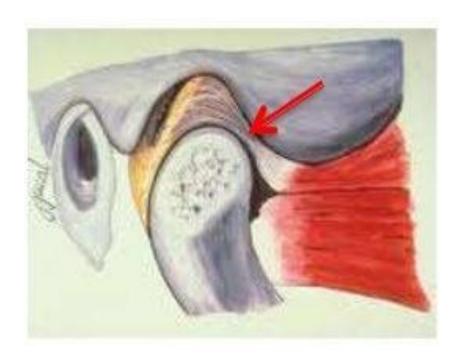
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#### CENTRIC OCCLUSION

 The occlusion of opposing teeth when the mandible is in centric relation. May or may not coincide with maximum intercuspation. (tooth to tooth relation).



 CENTRIC RELATION
It is the most retruded relation of mandible to maxilla when condyle in most posterior unstrained position in the glenoid fossa. (Bone to bone relation).



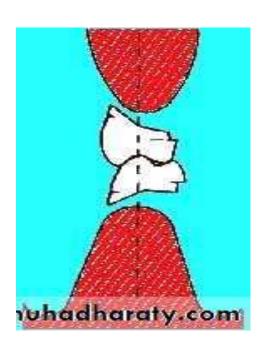
#### MAXIMUM INTERCUSPATION

 The complete intercuspation of the opposing teeth, independent of condylar position.



In complete denture construction it is essential that centric occlusion is in harmony with centric relation even though this condition doesn't always occurs in natural dentition.

• In centric occlusion, the buccal cusp of the mandibular teeth contact the central fossa of maxillary teeth, while the lingual cusps of the maxillary teeth fill into the central fossa of mandibular teeth, this overlap prevent cheek biting.





## IMPORTANCE OF CENTRIC RELATION

- Reproducible.
- Recordable.
- Stable.
- Regarded as a reference point for setting of teeth in maximal intercuspal position.

#### ECCENTRIC OCCLUSION

Any occlusion other than centric occlusion (protrusive, right and left lateral movement).

## CONCEPTS OF COMPLETE DENTURE OCCLUSION

- Balanced occlusion.
- Monoplane occlusion.
- Lingualized occlusion.

#### BALANCED OCCLUSION

Means contacting of the upper and lower teeth on the right and left and in the anterior and posterior occlusal areas (working, balancing and protrusive).



#### Working side:

The side to which the mandible move in a lateral excursion.



#### Balancing side:

That side of the mandible that moves toward the median line in a lateral excursion.

#### WORKING OCCLUSION

Occurred when the facial or buccal cusps of maxillary teeth meet the facial cusps of mandibular teeth and the lingual cusps of maxillary teeth meet the lingual cusps of mandibular teeth ( it isn't cusp tip to cusp tip relation, but cusp tip into cusp valley).

Enable to hold and crush food



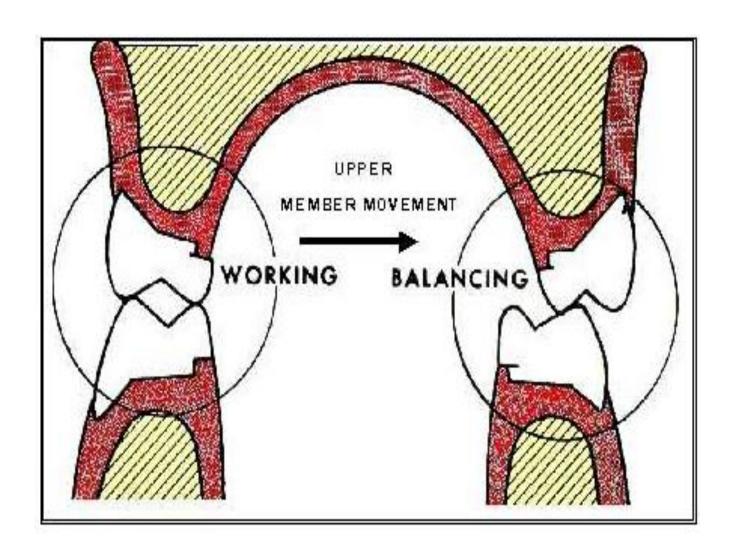
#### BALANCING OCCLUSION

 Occurred on the opposite side from working occlusion.

 The lingual cusps of maxillary teeth contact the buccal cusps of the mandibular teeth.

Maintain the denture in position





#### PROTRUSIVE OCCLUSION

 The mandible moves in in protrusive direction from centric position.

 The distal inclines of the maxillary buccal cusps contact the mesial inclines of the mandibular buccal cusps.

Bring anterior teeth into position for incision

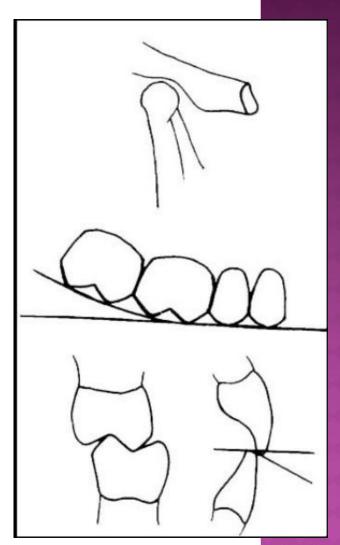


## IMPORTANCE OF BALANCED OCCLUSION

- 1- It avoid displacement of denture.
- 2-It help in repositioning of denture.
- 3- It minimize period of adaptation of the patient.
- 4-Prevent trauma to the supporting tissue

## FACTORS CONTROLLING THE BALANCED OCCLUSION

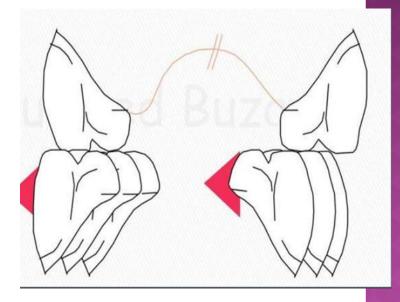
- 1- Inclination of condylar guidance.
- 2-Inclination of Incisal guidance.
- 3- Cusp height.
- 4- Orientation of the occlusal plane.
- 5- Prominence of the compensating curve.



### MONOPLANE OCCLUSION

 Characterized by occlusal contact of maxillary and mandibular teeth initially in maximum intercuspation.





The disocclusion of posterior teeth occurs because of their arrangement in a single plane, and the contact of the anterior teeth during movement of the mandible (there is no vertical overlap).



## IMPORTANCE OF MONOPLANE OCCLUSION

- Flat ridge.
- Class II jaw relations.
- Class III jaw relation.
- Handicapped patients.
- Cross bite.
- Doubtful or without any perfect centric relation records.

#### LINGUALIZED OCCLUSION

The maxillary lingual cusps are the main functional occlusal elements. These may oppose mandibular zero or shallow cusp teeth in balanced or non balanced patterns.



#### ADVANTAGES

- The presence of cusped teeth looks more natural when compared to zero teeth.
- Presence of lingual cusp centralize the occlusal forces and reduce frictional resistance of flat teeth.
- Stability during para-functional movements.

