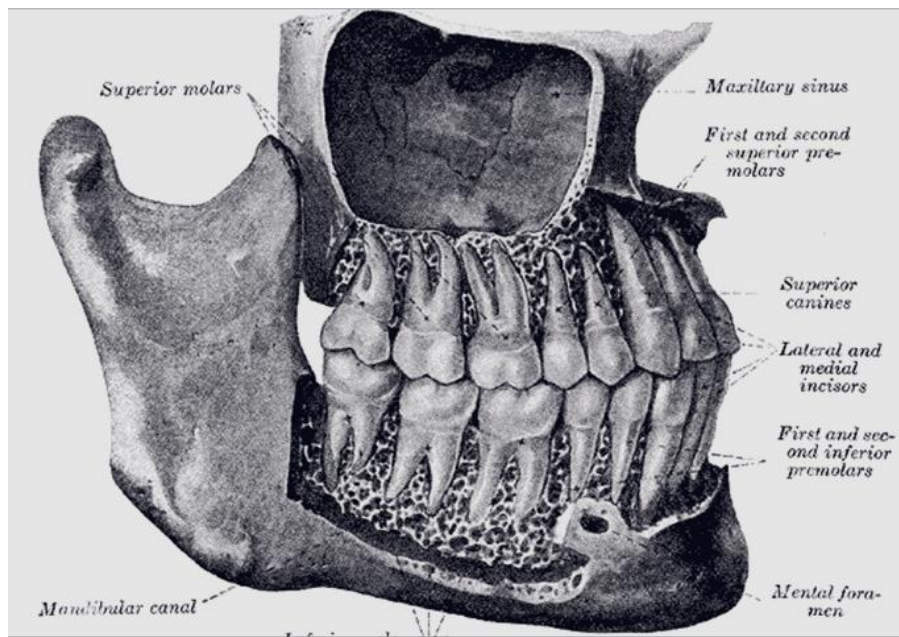


Dental Anatomy

Lec 8

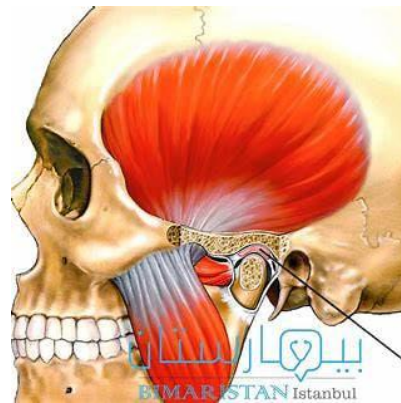
Dr. Dhifaf Kamil

The occlusion



- Occlusion: means simply the contact between teeth. More technically, it is the relationship between the maxillary (upper) and mandibular (lower) teeth when they approach each other, as occurs during chewing
- Malocclusion is the misalignment of teeth and jaws, or more simply, a "bad bite." Malocclusion can cause a number of health and dental problems.

- **Static occlusion** refers to contact between teeth when the jaw is closed and stationary, while dynamic occlusion refers to occlusal contacts made when the jaw is moving, as with chewing.
- **Centric occlusion** is the occlusion a person makes when they close their jaw and fit their teeth together in maximum inter cuspatation. It is also referred to as a person's bite, or inter cuspatation position (ICP). Centric relation, not to be confused with centric occlusion, is a relationship between the upper and lower jaw.



General features of occlusion:

- There are five positions of the mandible: centric relation, centric occlusion, right and left lateral movement, retrusive, and protrusive.
 - **Centric relation:** is jaw to jaw relationship (upper and lower jaws) with the condyles in their midmost and uppermost position, it coincides with centric occlusion.
 - **Centric occlusion:** is the occlusion when the jaws are closed and fit the teeth together in maximum intercuspal position, during the maximum intercuspal position the mesio-lingual cusp of maxillary molars occludes with central fossae of mandibular molars.
-
- The mesial surfaces of the central incisors both maxillary and mandibular are placed at median line.
 - The mandibular central incisors because they are narrower mesiodistally will contact maxillary central incisors only. Every other teeth will show contact with two opposing teeth.
 - Another point the location of cusp which contacting the opposing teeth: the mesiobuccal cusp of the mandibular first molar which is in contact in relation to the maxillary second premolar and first molar in centric relation.
 - In centric occlusion the relation from the buccal aspect showed the relationship of the first molars: the relationship of the mesiobuccal cusp of the maxillary molar to mesiobuccal groove of the mandibular molar.

Protrusive Position:

- The **mandible (lower jaw)** moves **forward** from its normal position.
- The **lower front teeth** are **in front of** the upper front teeth.



Retrusive Position:

- The **mandible moves backward** from its normal or centric relation.



Lateral movement is when the **mandible (lower jaw)** moves **to the side**, either **right** or **left**, relative to the maxilla (upper jaw).

- **Working side:** The side toward which the mandible moves.

Canine or group function contact

- **Non-working side (balancing side):** The side opposite the direction of movement.

Ideally no contact (no interference)

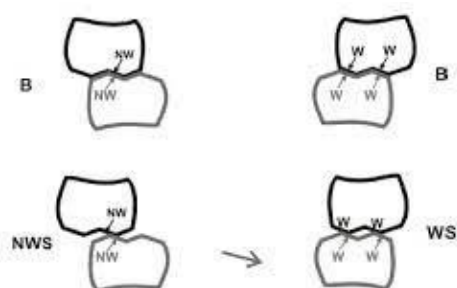


Fig. 11. When the mandible moves to the left, the inclines marked W must remain in contact on the working side (WS) and the inclines marked NW must remain in contact on the nonworking side (NWS), for them to remain in contact.



Left Lateral Movemet