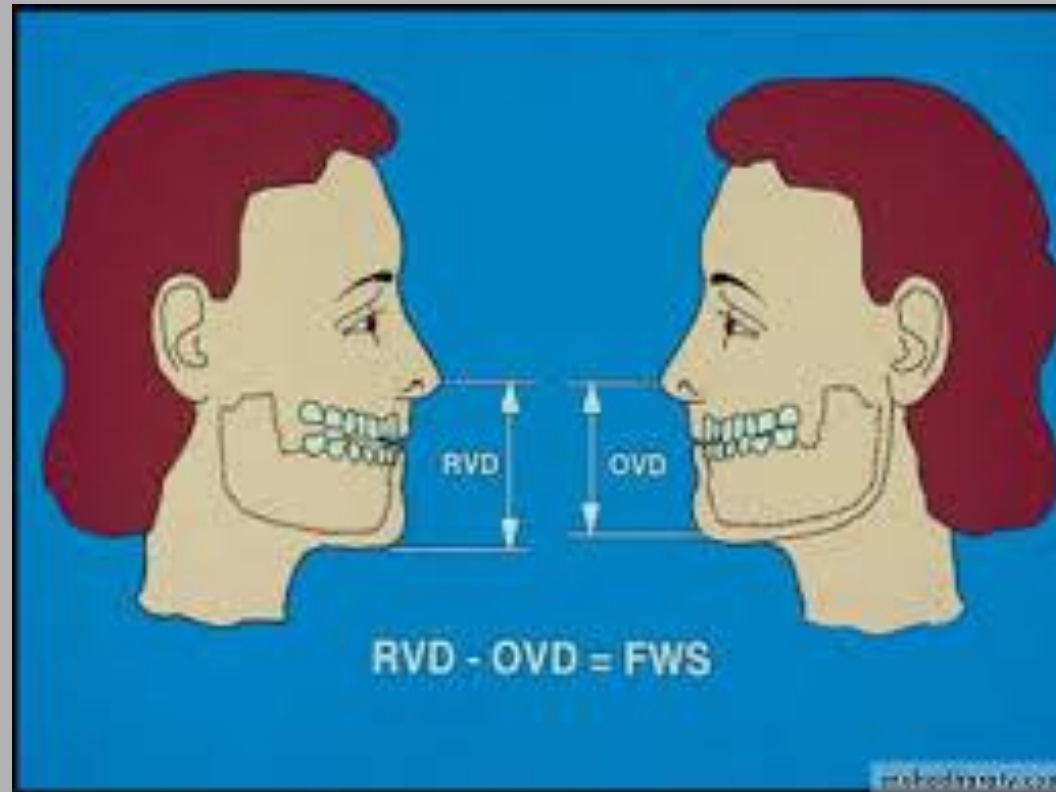


# **Maxillo mandibular relation ship lec (8)**

**Presented by : Assist lecturer samah khaleel**

**Maxillo mandibular relation ship record :** it is registration of any positional relationship of the mandible relative to the maxilla these record may be made at any vertical ,horizontal or lateral orientation



## Aim of recording the jaw relation

1. The aim of recording the jaw relation is to facilitate the adaptation of the complete denture to the masticatory system to give the optimal and comfortable function
2. The recording must include an appropriate vertical dimension of occlusion and stable occlusal plane contact in harmony with existing TMJ and masticatory muscles function, relationship between the prosthesis and facial soft tissue



# Types of jaw relation

## 1. Orientation jaw relation

## 2. Vertical Jaw relation

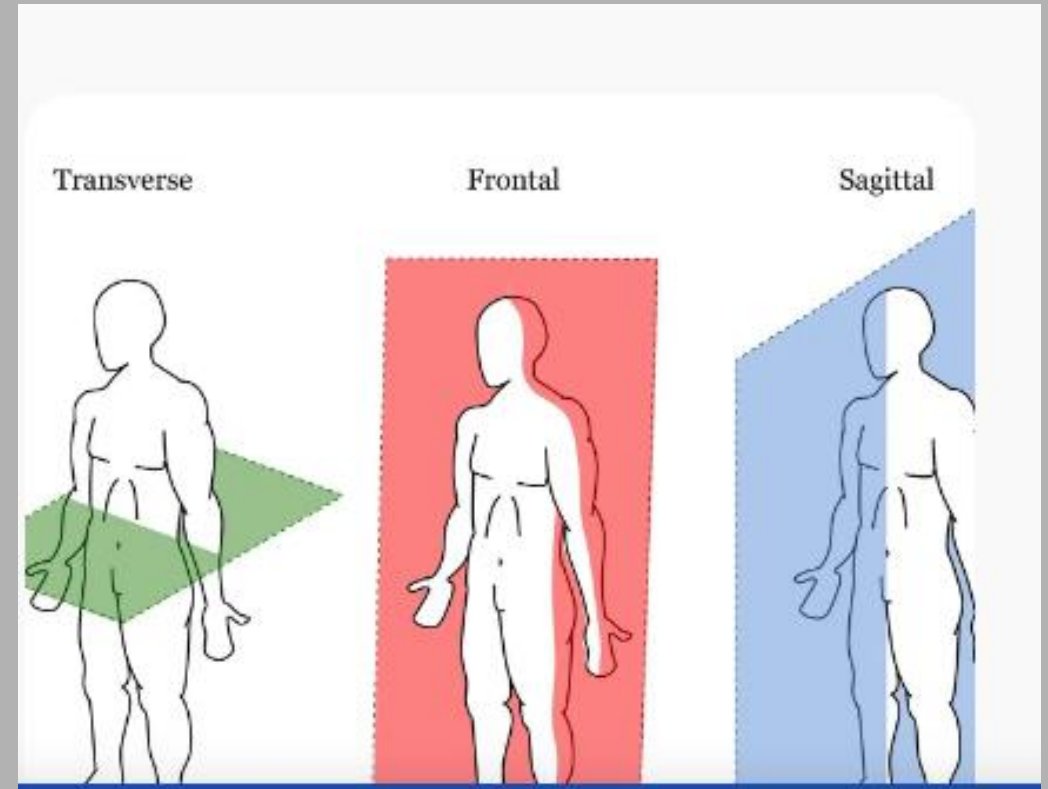
A. Rest vertical Dimension (OVD)

B. Occlusion vertical Dimention

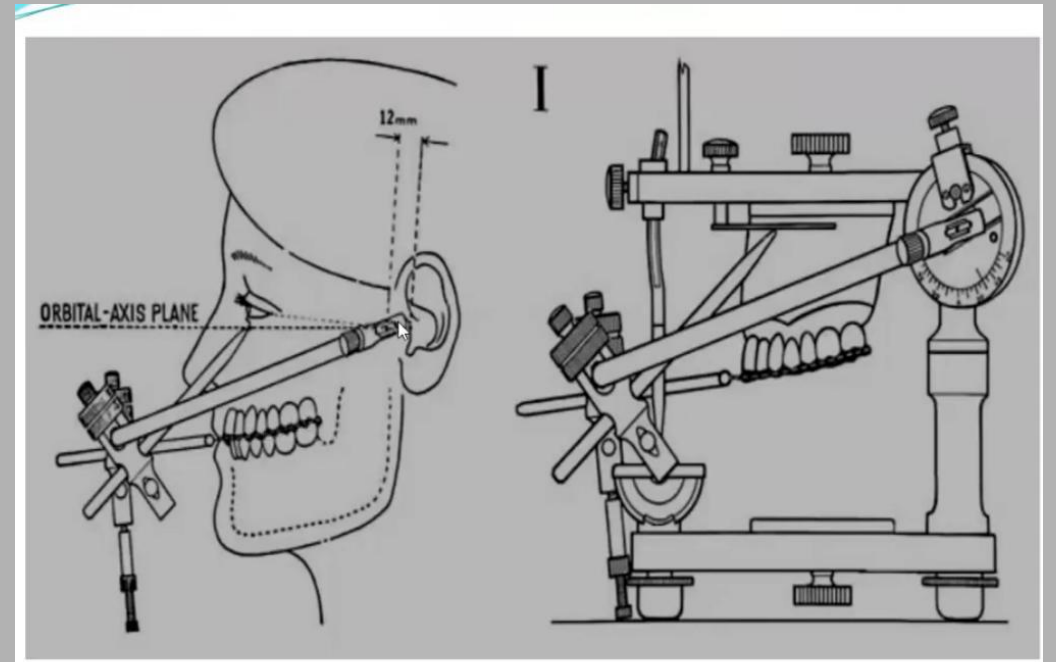
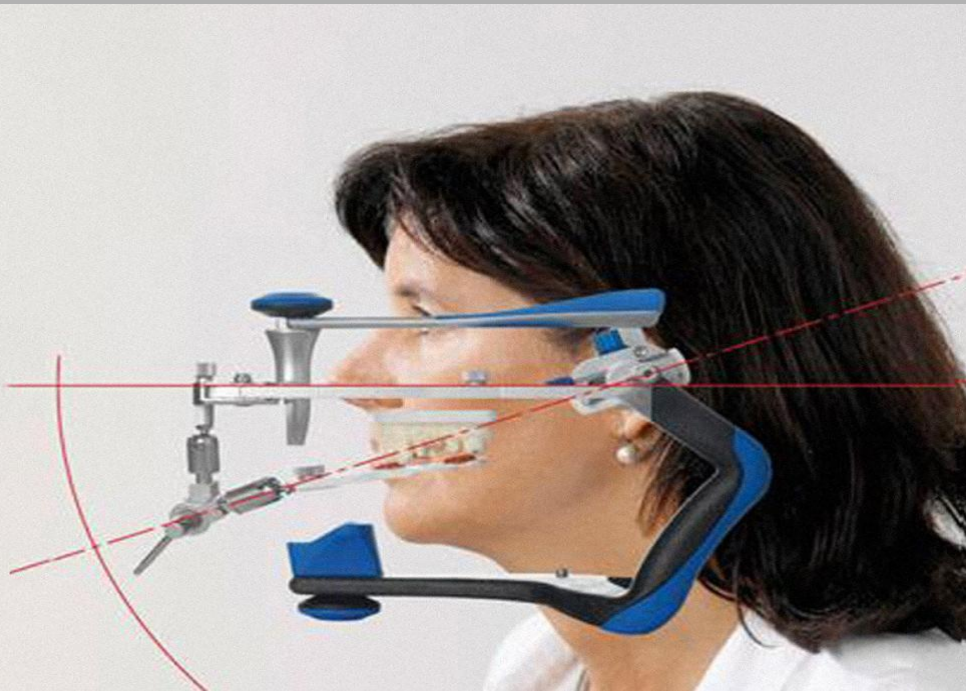
## 3.Horizontal jaw relation

A . Centric relation

B. Eccentric relation (protrusive and lateral relation )



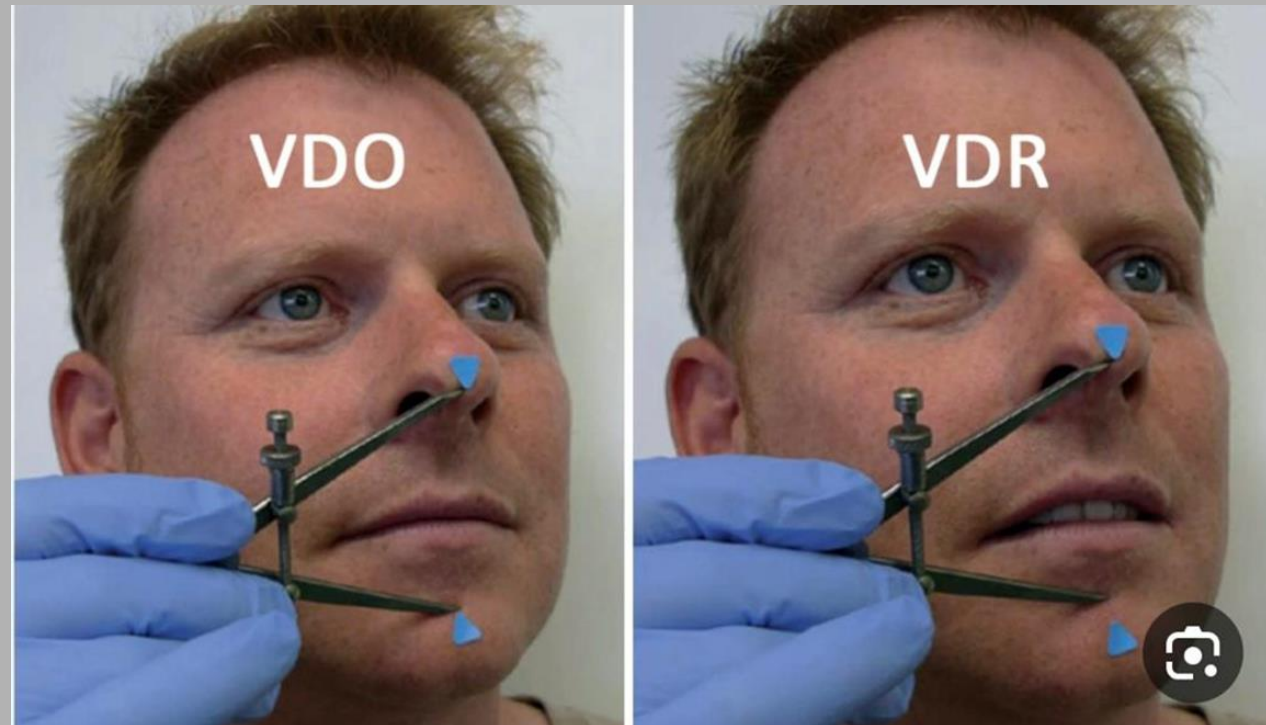
**Orientation relation :** it record the angulation of the maxilla in relation to the skull when the mandible in most posterior position in the sagittal plane





**Vertical jaw relation :** it is the amount of separation between maxilla and mandible in frontal plane

**Vertical dimension :** the facial height that exist between two arbitrary selected points one on maxilla and on the mandible

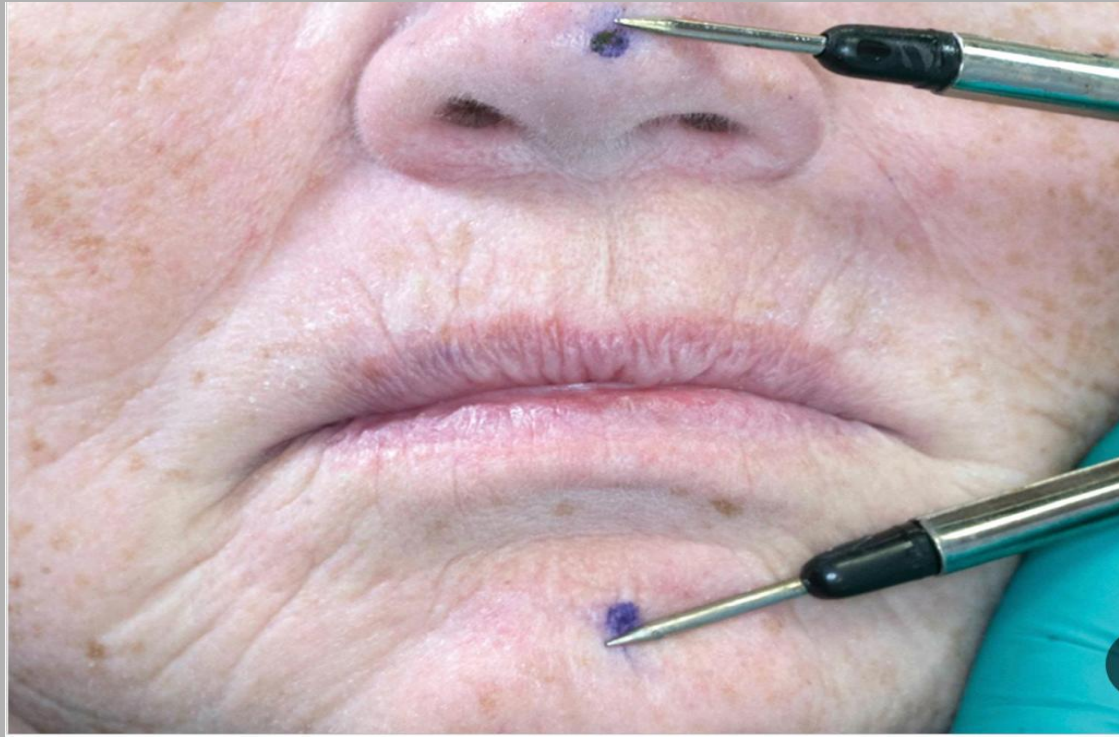


# Important of V.D

1. Functional role : which include mastication ,  
phonetic
  2. Esthetic role
  3. Physiological role : for health of the tissue
- Psychological role

## Increase of V.D lead to

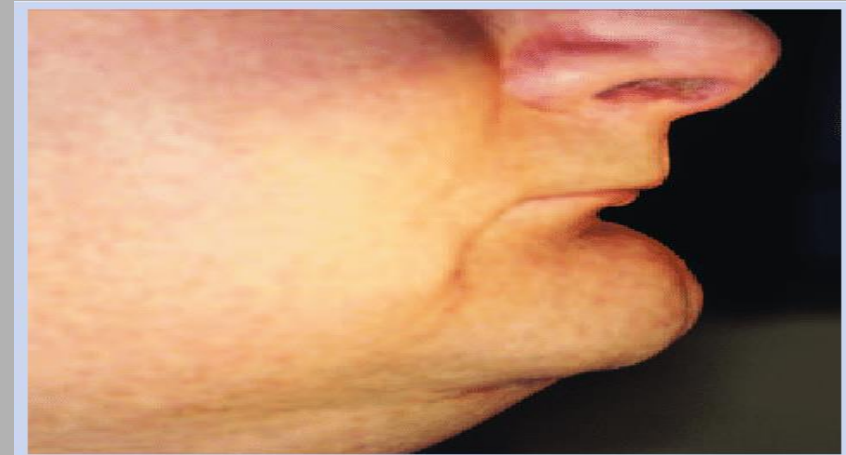
1. Clicking of the teeth in the speech and mastication
2. Lip un naturally separation when at rest
3. Premature contact between upper and lower teeth
4. Poor easthetic
5. Pain of the muscle





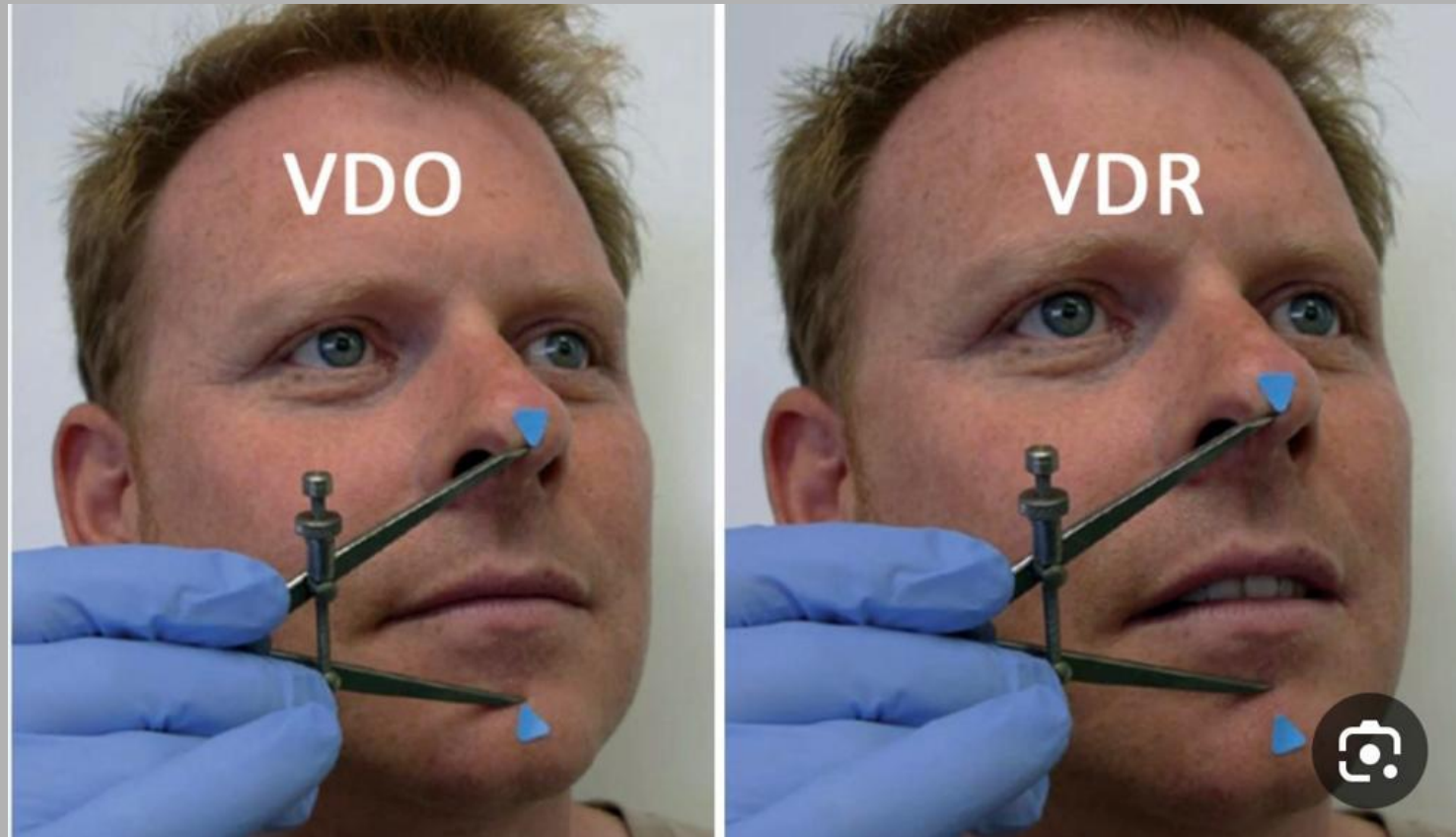
# Decrease of V.D lead to :

- 1.Reduce the action of the muscle with loss of muscle tone resulting in reduction in biting force
2. Flabbiness appearance of the face due to loss of muscle tone and wrinkles
- 3.Drooping of the corner of the mouth
4. Poor esthetic
- 5.TMj problem
6. Reduce the inter arch space and tongue space



# Classification of vertical dimension

A.V.D of rest is the distance between two selected points measured when the mandible in physiological position

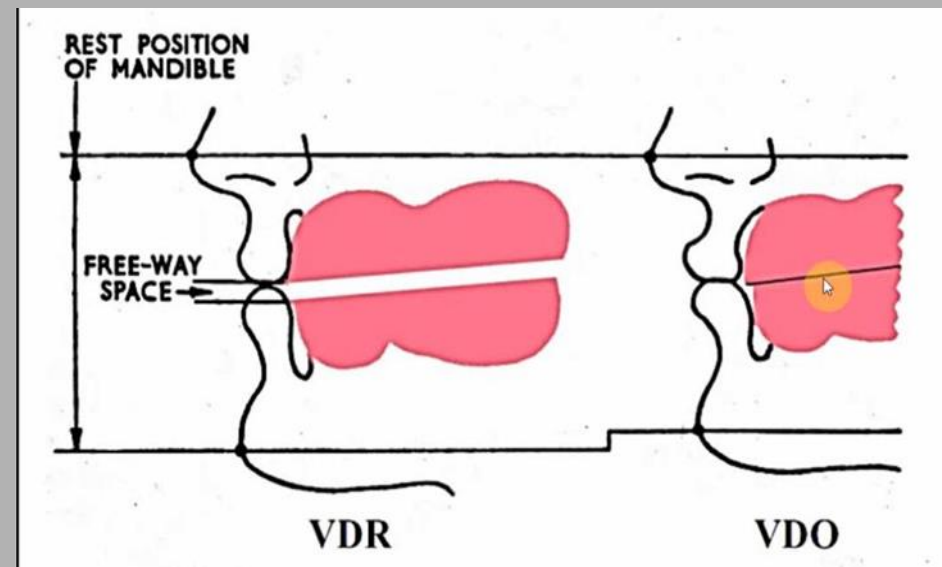


## Physiological rest position

It is the position of the mandible when individual is resting comfortably in an upright position and the muscle in minimum contraction activity

It controlled by :

1. The muscle that open ,close .protrude and retrude the mandible
2. Position of the head

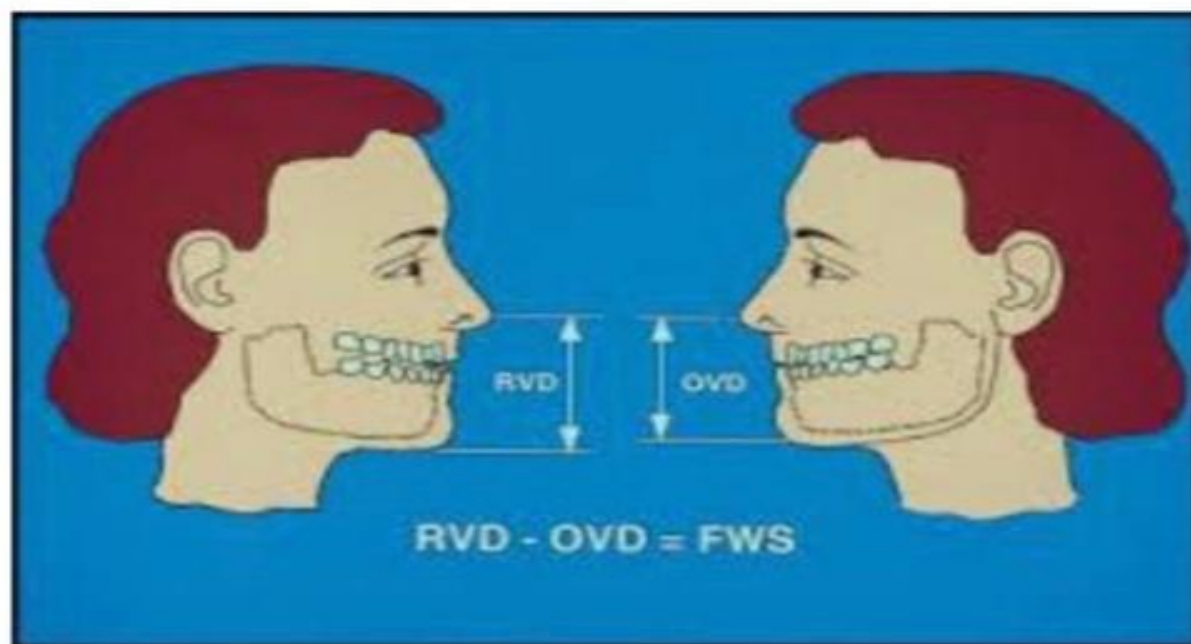


**V.D at occlusion** : measured between two points when the maxillary and mandibular teeth are intercusped. Thus, it is the vertical position of the mandible in relation to maxilla when the occluding members are in contact.



**free way space :-** The distance or gap existing between the upper and lower teeth when the mandible is in the physiological rest position , it's usually 2 – 4 mm when observed at the position of first premolar .

Vertical dimension of rest – free way space = vertical dimension of occlusion.



Thank  
you!