**\*ANATOMY \* Temperomandibular Joint \* LEC.12**

* **Temperomandibular Joint:** - When we talk about any joint, we must cover these main questions:  
   **🡪 What articulating what?  
   🡪 Are the articulated parts coverd by cartilage or not?  
   🡪 What is the type of the joint?   
   🡪 Is it synovial or not?  
   🡪** **If it’s synovial, is there a synovial membrane or not?**   
   **🡪** **Is there fibrous capsule or not?   
   🡪 Is it strengthened by ligaments?  
   🡪 what types of movements it can exert?**---------------------------------------------------------------------------------------------------------------------------------------  
    
  🡪**Page #2**: notice: - neck of the mandible  
   - head of the mandible “covered by cartilage”  
   - mandibular fossa of **temporal** bone “site where the head articulates”  
   - Notes:  
   🡪 the only joint in the body that is covered by “**fibro**cartilage”, because it’s multiply used.  
   🡪 it’s **type** is synovial  
   🡪 the break of the head of the mandible is the “articular tubercle”, tha clutches it.  
   🡪 the synovial membrane is only on the wall, not on the articular parts.  
   🡪 fibrous capsule is:  
    
   1. **wide** superiorly …… attaches margins of mandibular fossa  
   2. **tight** inferiorly …… attaches the neck of the mandible  
    
   🡪 since TMJ is formed of 2 subjoints:  
    
   1. **Superior J**. ….. backward/ forward  
   2. **Inferior J**. …… hinge movement (up/down)  
    
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  **🡪Page #1**: notice:  
   - here the mouth will open  
   - opening of the mouth requires 2 movements: 1. Protrusion “first”  
   2. Depression “second”  
   - surfaces of the articular disc must be **compatible** with the articular surfaces, meaning   
   if the surface is :   
   - convex 🡪 it must articulate with concave one “fossa”  
   - concave 🡪it must articulate with convex one “head”  
    
   - actually both surfaces of the disc are **concavoconvex** :  
   - superiorly : from anterior to posterior  
   - inferiorly : from posterior to anterior   
    
    
    
   🡪**Page #2**  
   - the distance that the mandible can move backward and forward is only from the mandibular fossa to the articular tubercle “and vice versa”.  
    
   - Hinge-like rotation means : 1. Protrusion then depression   
   - opening mouth requires “at first” forward movement of : 1. Disc   
   2. Head of mandible   
   3. Upper jaw  
   - Why lateral pterygoid? ,,, because of it’s insertion “recall”  
    
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   🡪**Page #3:** - lateral dislocation “by hitting” of the mandible is difficult in normal closed mouth , because it’s strengthened **laterally** TM ligament.  
   - lateral dislocation can be achieved “by hitting” during **yawning**.  
   - why the inferior attachment of the capsule is to the “neck” of the mandible? 🡪 **best site for catching it firmly against gravity “tight”**  
   🡪**Page #4:   
   \*Temporomandibu;ar ligaments:** - lateral TML is **oblique** 🡪**Advanced for “7akeem and 7akeemeh مش مهم :** - case of the J. in a pic.: - original location, then  
   - when the right side of the mandible is shifted to the right.  
    
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**How is that achieved?  
  
by lateral pterygoid**