

100 Facts of Temporomandibular Joint (sakshi)

- 1). a) What are considered to be the accessory ligaments of the TMJ?
b) What is their function?

Answer--> a) Sphenomandibular lig. and Stylomandibular Lig.

- b) Limit excessive openings

- 2) Where is the sphenomandibular ligament attached?

Answer---> Lingula of the Mand.

- 3). Where does the stylomandibular Ligament attach?

Answer---Angle of the Mandible

- 4). What ligament is most damaged when using an inferior alveolar nerve block?

Answer--> Sphenomandibular ligament

- 5). Where does the Temporomandibular ligament run?

Answer---> From the articular eminence to the mandibular condyle

- 6). What are the functions of the Temporomandibular ligament?

Answer--> a) Provides lateral reinforcement

B) Prevents posterior and inferior displacement of condyle

C) Main Stabilizing Ligament

- 7). What is another name for temporomandibular ligaments?

Answer---> Lateral ligament

- 8). What is another name for collateral ligaments?

Answer----> Discal Ligaments

- 9). Where do the collateral ligaments run?

Answer----> Arise from the periphery of the disc and are attached to the medial and lateral poles of the condyle.

- 10). What is the function of the Collateral ligaments?

Answer---> a) Stabilize the disc on top of the condyle

b) Resist movements of disc away from condyle during function

- 11). What are collateral ligaments made from? (collateral are known as discal ligament)

Answer----> Collagenous connective tissue Do Not Stretch

- 12). Which muscle will cause a deviation of the mandible, when protruding to the side of the damage?

Answer----> Lateral Pterygoid

- 13). What are the two parts of the lateral pterygoid?

Answer---> Superior belly and inferior belly

- 14). Where does the inferior belly of the lateral pterygoid run?

Answer--> From lateral pterygoid plate to neck of condyle

- 15). Where does the superior belly of the lateral pterygoid run?
Answer---> Greater wing of the sphenoid and infratemporal crest
Inserts on joint capsule ,articular disk and condyle of neck
- 16). What is the function of the superior belly of the lateral pterygoid muscle ?
Answer---> Assist in stabilizing the position of the articular disk during closing
- 17). What is the function of the masseter? Answer---> Elevation of the mand. (Jaw closing)
- 18). What is the function of the Temporalis? Answer---> A) Elevation of mand. (Jaw closing)
B) Retraction of the mand. (lower jaw backward)
- 19). What is the function of the medial pterygoid?
Answer---->Elevation of the mand. (Jaw closing)
- 20). What is the function of the inferior heads of the lateral pterygoid?
Answer----> Slight depression of the mandible (jaw closing)
- 21). What occurs with unilateral contraction of the lateral pterygoids?
Answer---> Lateral deviation of Mandibule.
- 22). what occurs with bilateral contraction of the lateral pterygoid muscles? Answer----> Protrusion of the Mandibule.
- 23). Where do you test a patients temporomandibular joint tenderness and noise?
Answer----> Joint palpated laterally over the post. surface of the condyles with the mouth open
- 24). Condyles are not symmetrical nor identical . True or false
Answer---> True
- 25). Dislocation of the TMJ is almost always ... Anteriorly and occurs while ?
Answer---> laughing or yawning
- 26). What is dislocation also referred as?
Answer--> Open lock
- 27). Hypermobility or hypertranslation of the mandibule ?
Answer----> Subluxation
- 28). What is the difference between Dislocation and subluxation?
Answer---> With subluxation patient can return the mandible to its normal position without assistance of the dentist
- 29). Which component of the TMJ has the most vasculature and innervation? Answer---> Retrodiscal tissue
- 30). Composed of dense fibrous connective tissue, and it is positioned in between the condyle and the fossa, dividing the joint into superior and inferior spaces?
Answer---> Articular disc
- 40). What is the middle part of the articular disk called?
Answer----> Thinner central intermediate zone

42). Which band is the thicker of the two on the articular disk?

Answer----> Anterior or posterior Posterior

43).What kind of tissue is attached to the post. Articular disk?

Answer---->Retrodiscal tissue

44). What kind of tissue is attached to the anterior band of the articular disk? Answer---->

Contiguous with the capsular ligament, the condyle, and the superior belly of lateral pterygoid muscle.

45). What are the articular surfaces of the TMJ covered with?

Answer---> Dense fibrous connective tissue

46). What does the layer of fibrocartilaginous tissue provide to the TMJ?

Answer---> Offers resistance against both compressive and lateral forces

47). What is the shape of the Condyle? Answer--> Elliptically shaped

long axis is oriented mediolaterally

48). What test is considered to be the gold standard for providing an image of the soft tissue of the temporomandibular joint, esp. the position of the articular disc?

Answer----> MRI

49). What is the major advantage of the MRI technique?

Answer----> No exposure of the patient to x-ray radiation

50). what sound is made by the articular disc when displaced to the anterior of the condyle?

Answer---->Clicking

51). What is a crepitation sound or a crepitus in the TMJ usually associated with?

Answer----> Degenerative process (osteoarthritis) of the condyle

52). What is a dull thud in the TMJ usually associated with?

Answer---->Self-reducing subluxation of the condyle

53). What is another term for ear ringing? Answer---> Tinnitus

54). a patient has clicking in their TMJ where is this joint most likely to be displaced?

Answer---> Anteromedial

55). What occurs during disc displacement of the TMJ?

Answer----> Collateral ligaments become elongated/torn..

Allows lateral pterygoid to pull articular disc out of place

56). What type of joint is the TMJ?

Answer--> Ginglymoarthroidal joint

57). What type of movements does the TMJ allow?

answer---> Hinge like rotation & Sliding

58). What is considered to be the nonfunctioning portion of the TMJ? Answer---->Articular fossa

(Ant 3/4 of large mand. fossa)

59). What is considered to be the functional part of the TMJ?

Answer --->Articular eminence

60). What is it that connects the mand. to the temporal bone?

Answer--->Combined hinge and gliding joint

61). What is the only movable joint in the skull that has dense fibrous connective tissue on its articular surfaces?

Answer--->TMJ

62). The vessel supplies the TMJ?

Answer----->

1).Deep temporal and Masseteric of max. artery

2)Branches of superficial temporal from external carotid

63). What is the venous drainage of the TMJ?

Answer-----> Superficial temporal, maxillary, and pterygoid plexus

64). What is the capsule of the TMJ innervated By ?

Answers-----> Auriculotemporal nerve (V3)

65). What is the anterior region of the TMJ innervated by?

Answer---> a). Masseteric and deep temporal from V3

b). Sensory from V3

66). What path do the nerve fibers that innervate the TMJ follow?

Answer---> Vessels of the blood supply; End as free nerve endings

67). What parts of the TMJ are not innervated?

Answer-----> Articular cartilage and central part of the articular disc.

68). Are myelinated or unmyelinated nerves seen in the TMJ? Answer----> Both

69). What is the source of proprioception in the TMJ?

Answer-----> Retrodiscal tissue

70). What structure of the TMJ secretes the fluid that lubricates the TMJ?

Answer-----> Inner synovial layer of fibrous capsule

71). The fibrous capsule of the TMJ is fairly thin except where?

Answer----> Laterally where it forms the temporomandibular ligament (lateral)

72). Where is the fibrous capsule of the TMJ firm? Why?

Answer--> Medially and Laterally Stabilize mand. during movement

73). 1)Where is the fibrous capsule of the TMJ loose? 2)Why?

Answer---> 1) Anterior and Posterior

2) Allow mand. movement

74). What are large amounts of synovial fluids an indication of in the TMJ?

Answer---> Painful internal derangements

75). What is the purpose of the joint capsule and ligaments of the TMJ?

Answer--> Restrict excessive displacement of the mandible.

76). Thicker layer of fibrous tissue which is reinforced by accessory ligaments?

Answer----> Outer fibrous layer of the fibrous capsule of the TMJ

77). Translatory movements take place in which compartment of the TMJ?

Answer---> Upper compartment

(mandibular fossa - articular disc)

78). Rotary motions take place in which compartment of the TMJ?

Answer---> Lower compartments

(condyle - articular disc)

Hinge-type Rotation

79). with the fracture of condylar neck, why condylar head remains in the mandibular fossa?

Answer---> Due to TMJ Ligament (main stabilizing ligament of the TMJ). This ligament restricts the downward and posterior movement of the mandible & guides the forward motion of the Condyle during opening.

80). The mandible will always deviate to the side of injury . True or false ??

Answer--> True

81). muscles helps in closing the mouth / elevating the mandible results from bilateral contraction of which three muscles ?

Answer--a) anterior fibers (vertical fibers) of Right and left Temporalis muscle.

b). The right and left masseter muscle

C). the right and left medial pterygoid muscle

82). retrusion of Jaw results from the bilateral contraction of ?

Answer---> bilateral contraction of posterior fibres (horizontal fibres) of the Temporalis muscle.

83). Anteroinferior aspect of mandibular condyle is ____ ?

Answer---> Concave

84). posterior aspect of mandibular Condyle is _____,?

Answer--> Rounded & convex

85) Do central portion of Articular disc is vascular ?

Answer--> avascular & lack of innervation at central portion of Articular disc

86). nonfunctional part of TMJ?

Functional part of TMJ ?

Answer-->

articular fossa---> nonfunctional part.

Articular eminence / Articular Tubercle----> functional part

87). _____belly of lateral pterygoid inserts on the neck of the Condyle ?

Answer--> inferior belly

88). dislocation of either or Both TMJ can occur ?

Answer--> when the Condyle translates anterior to the crest of the Articular eminence

89). fibrous capsule is fairly thin except laterally where it forms ?

Answer--lateral TMJ ligament.

Medially & laterally, The capsule is firm to stabilize the mandibular movements

90). pure Rotation of Mandibule involves which two planes of movement?

Answer--> A) frontal plane--UP and down

B) Sagittal plane---Forward & Backwards

91). most stable & most easily reproduced position?

Answer--> Initiating position (Centric relation)

92). What is the maximum opening movement of Mandibule depending on the age and size of individual ?

Answer---> 50-60mm

93). which movements are the limits to which mandible can move ?

Answer---> Border movements

94).which movements generally occur within the border movements??

Answer--> Functional movements

95). which jaw position is ligament guided position?

Answer--> Centric Relation

96). In protrusive movements, the Condyles of Mandibule have moved in which direction?

Answer---> Downward & forward Direction

97). which movement require Condyles to move backward and upward ?

Answer--> Retrusive movement

98). anterior Guidance/ anterior Coupling determined by ?

Answer---> 1. overbite

2. Overjet

99. Anterior guidance is the guidance provided by the anterior teeth when the mandible goes into a _____ movement ?

Answer--> Lateral or protrusive movement.

100. muscle guided position?

tooth guided position?

Answer--->

Muscle guided position---rest position of Mandibule or postural position.

centric Occlusion / intercuspal position--> tooth guided position