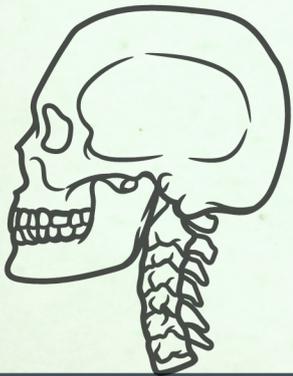


QUIZ TIME

Anatomy head & neck

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Lec: 22



Q1 A newborn has difficulty chewing, loss of jaw jerk, and weakness of muscles elevating the mandible. Which pharyngeal arch is MOST likely affected?

- A. Second
- B. Third
- C. Fourth
- D. First
- E. Sixth

Answer: D

First arch → muscles of mastication → mandibular nerve.

Q2 Which combination of skeletal elements originates from the second pharyngeal arch?

- A. Malleus and incus
- B. Greater horn of hyoid
- C. Stapes and styloid process
- D. Thyroid and cricoid cartilages
- E. Corniculate cartilages

Answer: C

Q3 A patient presents with loss of facial expression, hyperacusis, and intact mastication. Which pharyngeal arch derivative is involved?

- A. First arch muscle
- B. Second arch muscle
- C. Third arch muscle
- D. Fourth arch muscle
- E. Sixth arch muscle

Answer: B

Facial nerve + stapedius → second arch.

Q4 Damage to the glossopharyngeal nerve would MOST directly affect which muscle derived from the pharyngeal arches?

- A. Stylohyoid
- B. Cricothyroid
- C. Stylopharyngeus
- D. Levator palati
- E. Thyroarytenoid

Answer: C

Q5 A child has hypocalcemia due to absence of the inferior parathyroid glands. Which embryological structure failed to develop properly?

- A. Dorsal wing of 4th pouch
- B. Ventral wing of 4th pouch
- C. Dorsal wing of 3rd pouch
- D. Ventral wing of 3rd pouch
- E. Ultimobranchial body

Answer: C

Q6 Failure of descent of which structure would MOST likely result in absence of the thymus?

- A. First pharyngeal pouch
- B. Second pharyngeal pouch
- C. Ventral wing of third pouch
- D. Dorsal wing of fourth pouch
- E. Cervical sinus

✓ Answer: C

Q7 A neonate (newborn) presents with a persistent lateral neck cyst derived from ectoderm. This condition MOST likely results from failure of obliteration of which structure?

- A. First pharyngeal cleft
- B. Second pharyngeal pouch
- C. Cervical sinus
- D. Ultimobranchial body
- E. Thyroglossal duct

✓ Answer: C

Q8 Which structure is formed by both the 4th and 6th pharyngeal arches?

- A. Hyoid bone
- B. Epiglottis
- C. Laryngeal cartilages
- D. Styloid process
- E. Mandible

✓ Answer: C

Big-picture pattern to remember

- Arches → muscles + nerves
- Pouches → glands + cavities
- Clefts → ectoderm + surface structures
- Clinical clues localize the arch

Q9 A patient has loss of intrinsic laryngeal muscle function but preserved cricothyroid action. Which pharyngeal arch is MOST likely defective?

- A. First
- B. Second
- C. Third
- D. Fourth
- E. Sixth

✓ Answer: E

Sixth arch → intrinsic laryngeal muscles → recurrent laryngeal nerve.

Q10 (Clinical Case)

A newborn has absence of palatine tonsils, recurrent throat infections, and otherwise normal facial muscles and hearing. Which embryological structure is MOST likely abnormal?

- A. First pharyngeal pouch
- B. Second pharyngeal pouch
- C. Third pharyngeal pouch
- D. Fourth pharyngeal pouch
- E. Second pharyngeal cleft

✓ Answer: B