

بجانب

# Respiratory System

## Past papers & Test bank

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## **Past papers :**

1-During early development of the respiratory system the laryngotracheal tube maintains in communication with the primitive foregut. Which of the following embryonic structure is responsible for partitioning these two embryonic structure ?

- a) Laryngotracheal diverticulum
- b) Tracheoesophageal septum
- c) Tracheoesophageal fistula
- d) Laryngotracheal septum
- e) Tracheoesophageal fold

Ans:b

2-the development of the tracheoesophageal septum occurs at week:

- a) 2
- b) 3
- c) 4
- d) 5
- e) 6

Ans:c

3-With development of the nose, the philtrum of the upper lip is developed from which of the following?

- a) Frontonasal prominence
- b) Maxillary prominence
- c) Lateral nasal prominence
- d) Medial nasal prominence
- e) Palatal Prominence

Ans:d

4-Cleft lip is a result of fusion between maxillary prominence and:

- A. Mandibular
- B. Lateral nasal
- C. Medial nasal

Ans: C

5-The definitive pleural cavity is formed by:

- A. Incorporation from pericardial pleura
- B. Incorporation from peritoneal pleura
- C. Somatopleuric mesenchyme
- D. Splanchnopleuric mesenchyme

Ans: C

6-The number of segments in the lungs after the postnatal period is:

- A. 10
- B. 15
- C. 23
- D. 27

Ans: C

7-Laryngeal atresia, all of the following statements are correct except:

- a) Prenatal ultrasonography permits diagnosis of these anomalies
- b) it is a rare anomaly
- c) Distal to atresia the airways become constricted
- d) It is known as congenital high airway obstruction syndrome
- e) It is accompanied with fetal ascite

Ans:C

8-Concerning the maturation of the lung, all the following statements are correct EXCEPT:

- a) The growth of lungs after birth is mainly due to an increase in the number of alveoli.
- b) In the terminal sac period, respiration is impossible.

- c) At the end of the 6th-month type I and type II alveolar cells are developed
  - d) The canalicular period lasts from the 16th to the 26th weeks.
  - e) In pseudoglandular period, no respiratory bronchioles or alveoli is present
- Ans:b

9-Which of the following conditions are associated with oligohydramnios:

- a) Laryngeal atresia
- b) Tracheoesophageal fistula
- c) Congenital cyst of the lung
- d) Ectopic lung lobe
- e) Pulmonary hypoplasia

Ans:E

10-Wrong about ARDS?

- a) Thyroxine is the most important stimulator
- b) Causes collapsing of the alveoli
- c) Accounts for 2% of death in neonates

Ans:c

11-A preterm baby usually has difficulty breathing, However the respiratory system developed enough for survival by:

- a) 17 weeks
- b) 24 weeks
- c) 28 week
- d) 36 weeks
- e) none of the above

Ans:c

12-A neonate after birth was examined by a doctor. In chest x- ray image, the doctor find a peripheral lung opaque. What the most common cause of this?

- a) Collapsed lung due to traumatic delivery
- b) Congenital deficiency of surfactant
- c) Pleural effusion
- d) This is normal, where alveoli will be inflated several days after delivery

Ans: d

13- The medial nasal prominence participate in all of the following except?

- a) Tip of the nose
- b) Palatine shelves
- c) Nasal crest
- d) Philtrum of upper lip
- e) Upper jaw

Ans: b

14-Wrong statement:

- a) Alveoli number at birth is same as number in adults
- b) Most of alveoli develop after birth

Ans: a

Q&A:

baby suffers from vomiting and regurgitation upon feeding:  
Esophageal atresia and trachea-esophageal fistula.

The appearance of the laryngotracheal groove is in:  
4th week

**The lack of the development of cartilage in the bronchus causes:**

**Ans : bronchial stenosis**

**Baby vomits what it eats:**

**Ans: tracheoesophageal fistula**

**wrong about tracheoesophageal fistula or atresia:**

**Ans : it causes pulmonary hypoplasia**

**An infant with polyhydramnios that was born with a lot of amniotic fluid in his mouth, which of the following is mostly the cause:**

**Ans : proximal esophageal atresia with tracheoesophageal fistula.**

**Wrong about terminal sac period of lung maturation:**

**Ans : lack of respiratory membrane**

**Wrong about surfactant:**

**Ans : Usually deficient in “term” babies**

**Which of the following is wrong:**

**Ans : the growth of alveoli after birth is mainly by increase in size**

**lung opacity in new born:**

**Ans : Is normal**

**C-shaped trachea cartilage is derived from:**

**Ans : Splanchnic mesoderm**

## **Test banks :**

**1. The respiratory bud arises as an outgrowth from which embryonic structure?**

- a) Hindgut
- b) Midgut
- c) Foregut
- d) Pharyngeal gut

**Ans: c**

**2. The primary palate is formed by the fusion of which embryonic structure?**

- a) Medial nasal prominences
- b) Maxillary prominences
- c) Mandibular prominences
- d) Lateral nasal prominences

**Ans: a**

**3. The definitive choanae are formed during which phase of development?**

- a) 4th week
- b) 5th week
- c) 6th week
- d) After the formation of the secondary palate

**Ans: d**

**4. The nasal cavity begins to develop due to invagination of the nasal placodes during which week?**

- a) 4th week
- b) 5th week
- c) 6th week
- d) 7th week

**Ans: b**

**5. Failure of fusion between the maxillary and medial nasal prominences results in:**

- a) Cleft palate
- b) Cleft lip
- c) Esophageal atresia
- d) Tracheoesophageal fistula

**Ans: b**

**6. The development of the respiratory tract lining epithelium is derived from:**

- a) Splanchnic mesoderm
- b) Endoderm
- c) Ectoderm
- d) Somatic mesoderm

**Ans: b**

**7. The pleural cavity is formed from which of the following embryonic layers?**

- a) Splanchnopleuric mesoderm
- b) Somatopleuric mesoderm
- c) Visceral mesoderm
- d) Parietal mesoderm

**Ans: b**

**8. The terminal sac period of lung maturation is characterized by the development of:**

- a) Terminal bronchioles
- b) Respiratory bronchioles
- c) Primitive alveoli
- d) Mature alveoli

**Ans: c**

**9. Pulmonary hypoplasia is associated with:**

- a) Congenital diaphragmatic hernia
- b) Oligohydramnios
- c) Both a and b
- d) None of the above

**Ans: c**

**10. The most common tracheoesophageal anomaly is:**

- a) H-shaped tracheoesophageal fistula
- b) Proximal esophageal atresia with distal tracheoesophageal fistula
- c) Distal esophageal atresia with proximal tracheoesophageal fistula
- d) Isolated esophageal atresia

**Ans: b**

**11. During which week do the maxillary prominences start compressing the medial nasal prominences to form the philtrum?**

- a) 4th week
- b) 5th week
- c) 6th week
- d) 8th week

**Ans: c**

**12. What is the most critical factor in enabling respiration at birth?**

- a) Formation of the surfactant membrane
- b) Development of terminal bronchioles
- c) Clearance of fetal lung fluid
- d) Crying of the newborn

**Ans: a**

- 13. Which of the following is incorrect regarding lung maturation?**
- a) Respiratory bronchioles develop during the pseudoglandular period**
  - b) Surfactant production increases significantly before birth**
  - c) The alveolar period begins in the 8th month**
  - d) Mature alveoli develop after birth**

**Ans: a**

- 14. Which condition is not associated with oligohydramnios?**
- a) Pulmonary hypoplasia**
  - b) Congenital diaphragmatic hernia**
  - c) Lung cysts**
  - d) Fetal growth restriction**

**Ans: c**

- 15. The most common complication of congenital lung cysts is:**
- a) Pulmonary hypoplasia**
  - b) Chronic lung infections**
  - c) Respiratory distress syndrome**
  - d) Polyhydramnios**
- Ans: b**