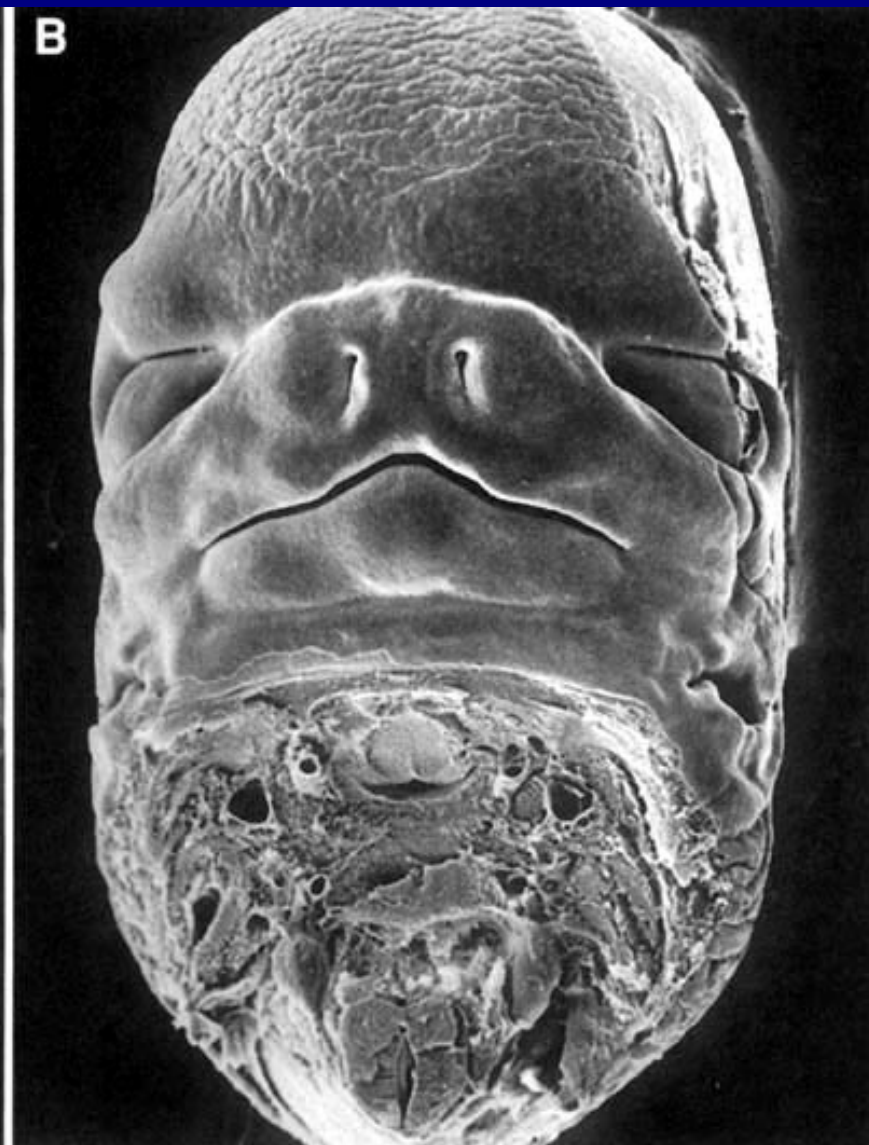
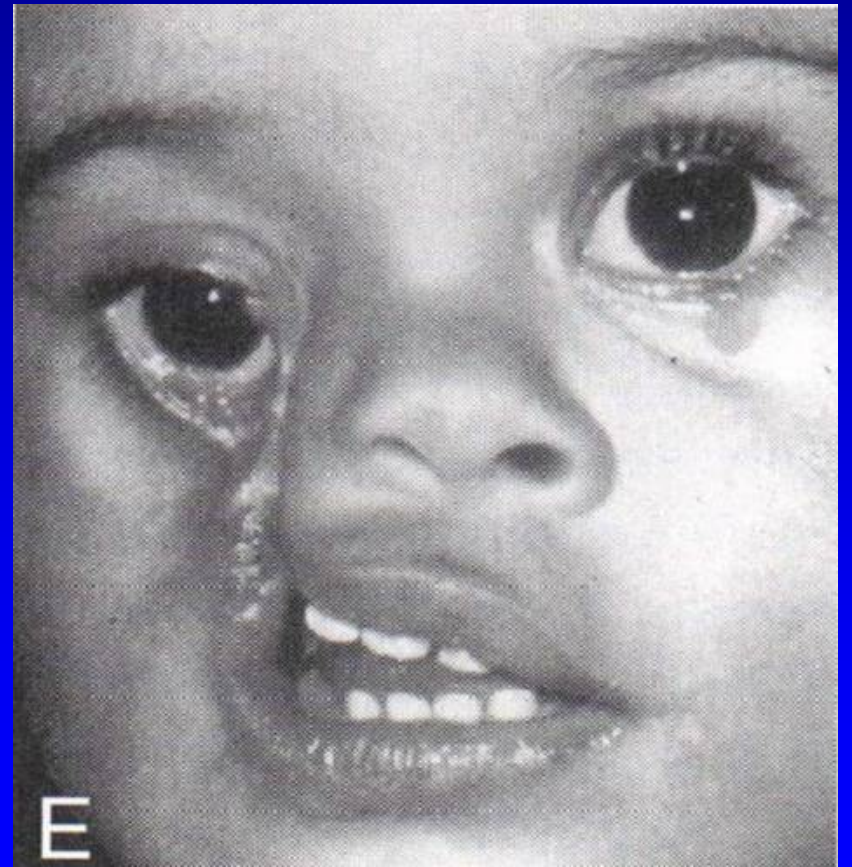
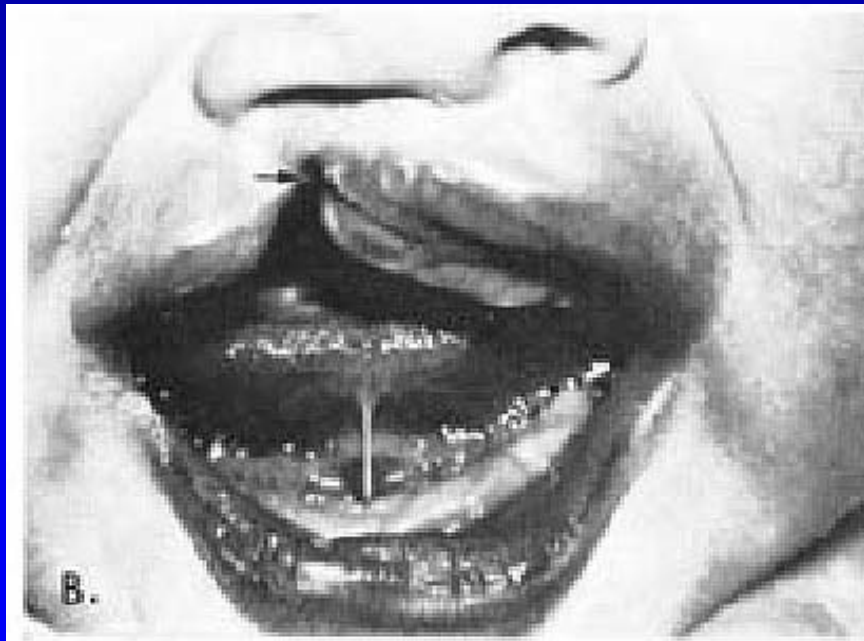
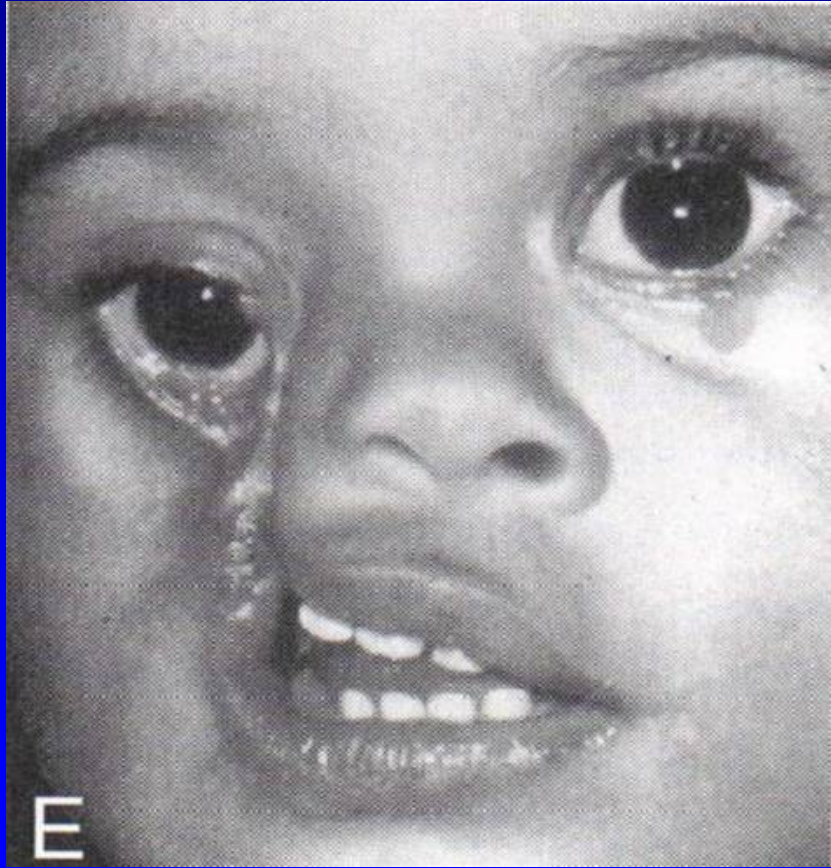


# 颜面的发生









3



4



5



6



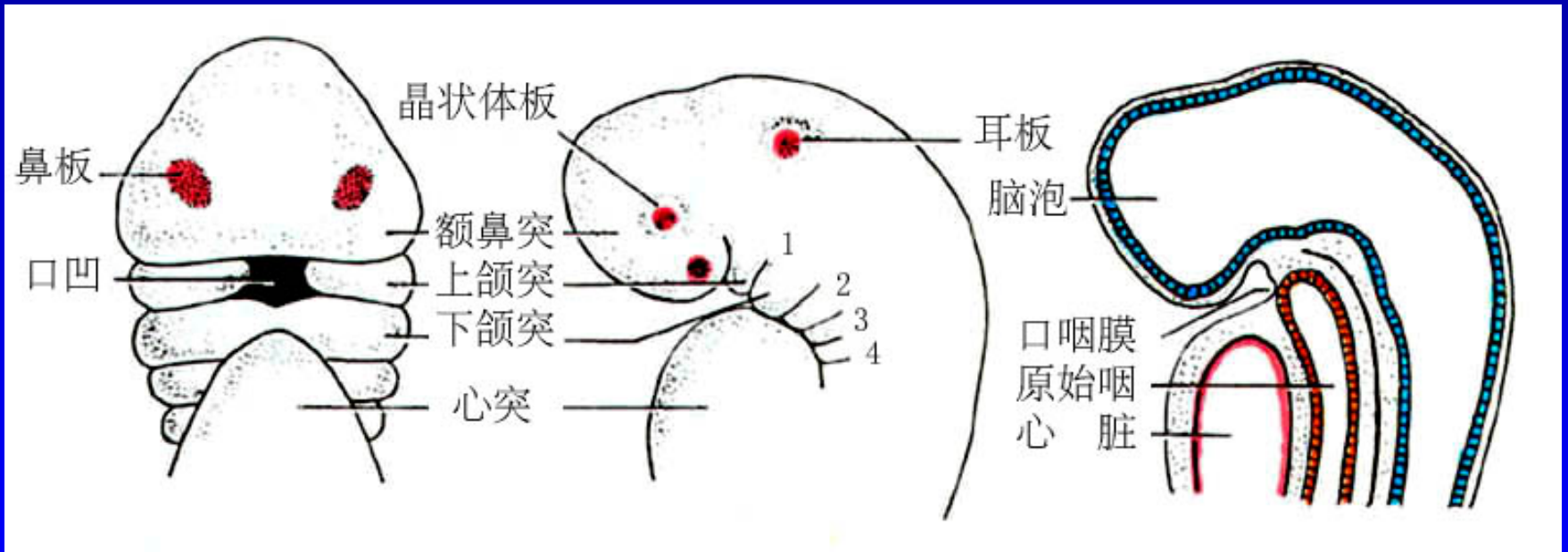
7



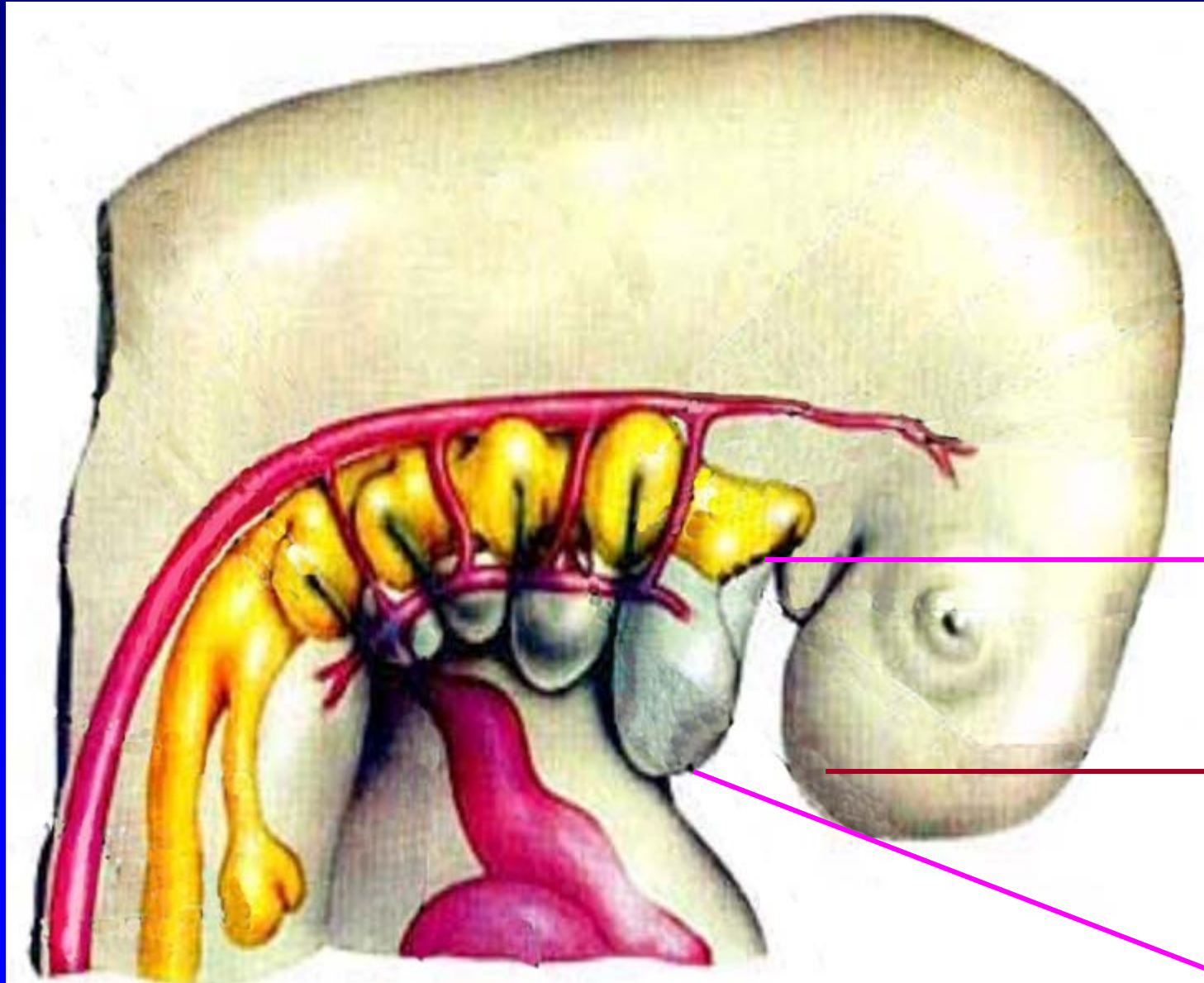
8



# 第4周人胚头部示意图



# 咽的侧面观



口咽膜

额鼻突

鳃弓

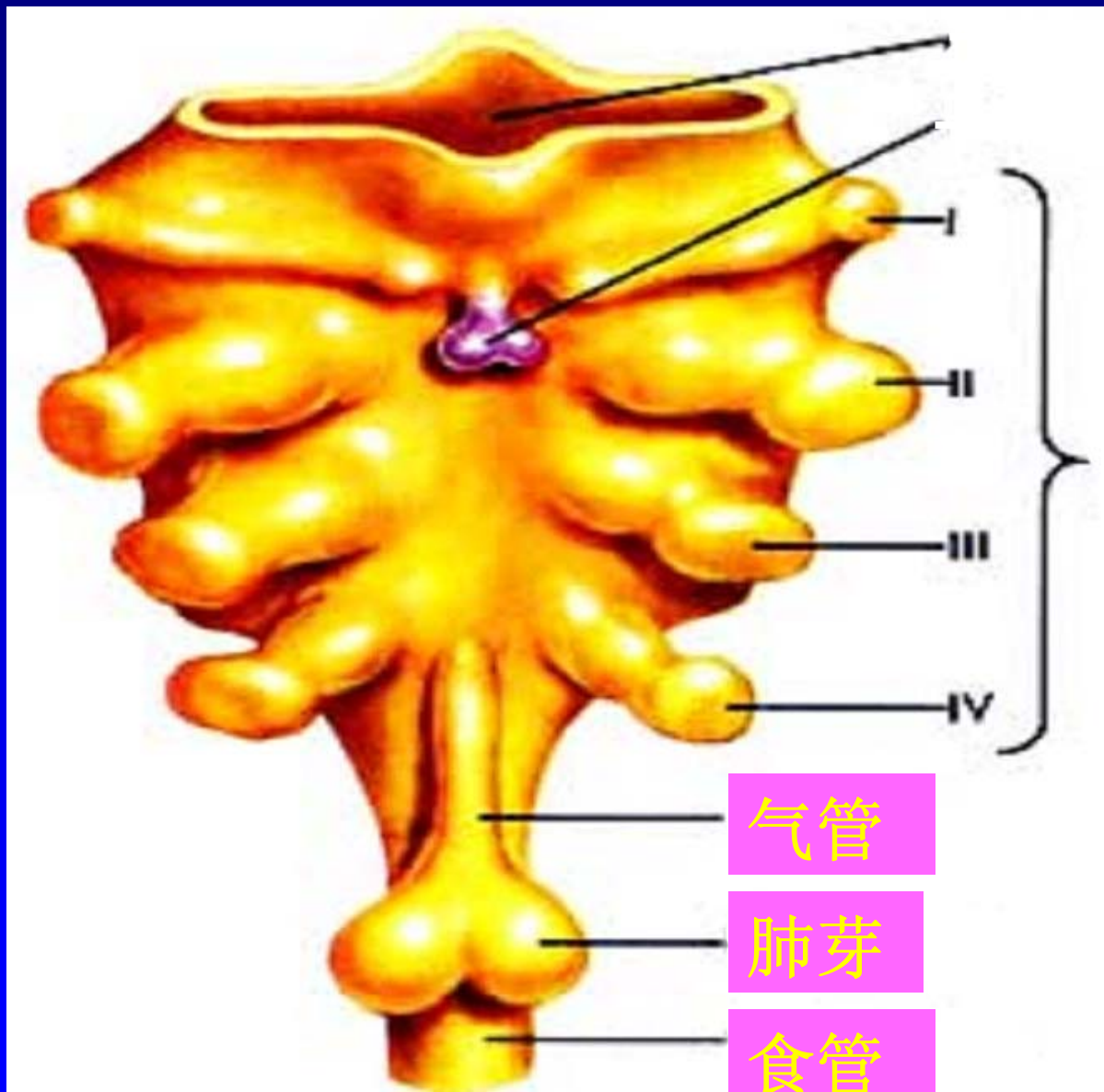


# 原始咽分化的立体模式图

口腔

甲状腺原基

咽囊



气管

肺芽

食管

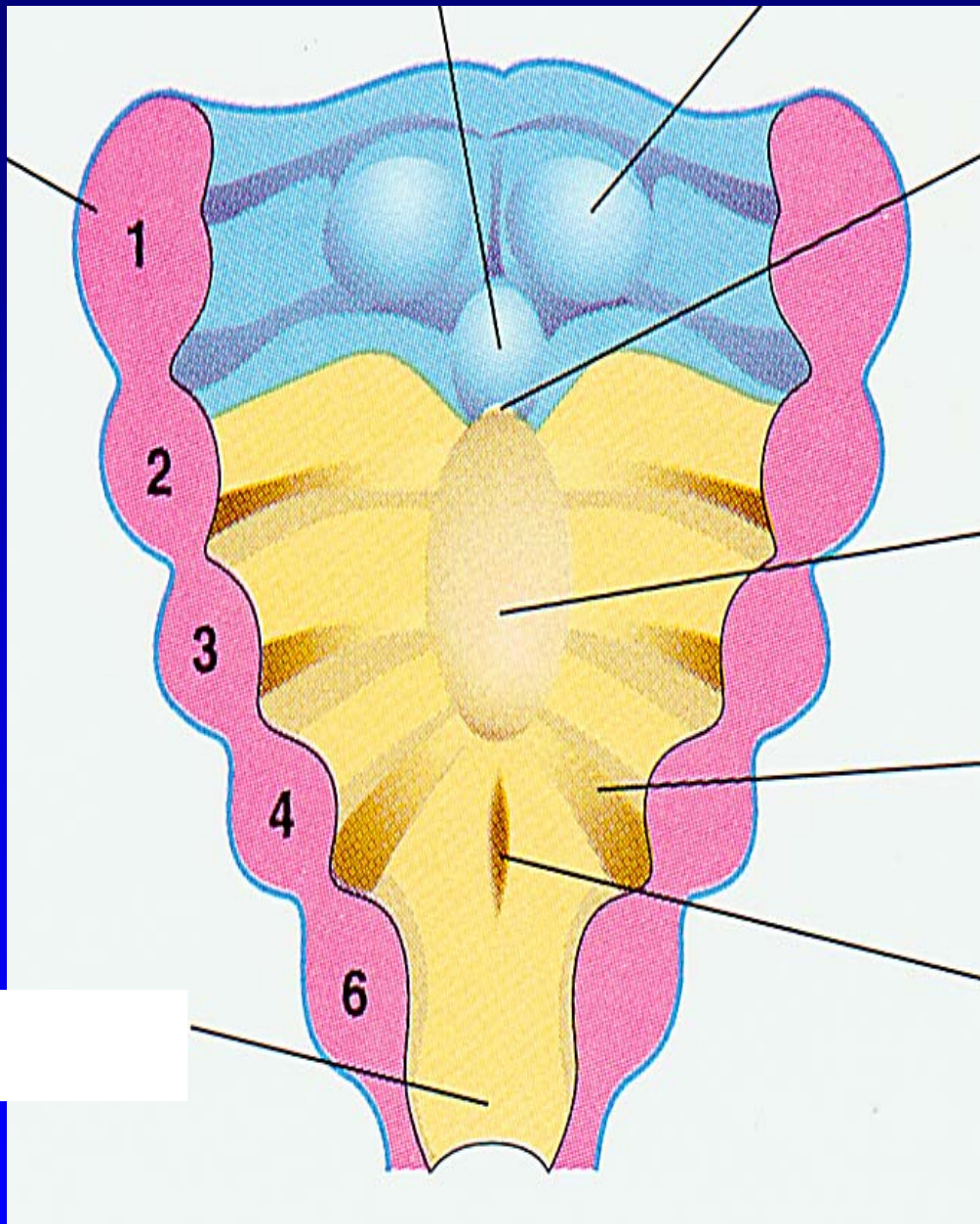
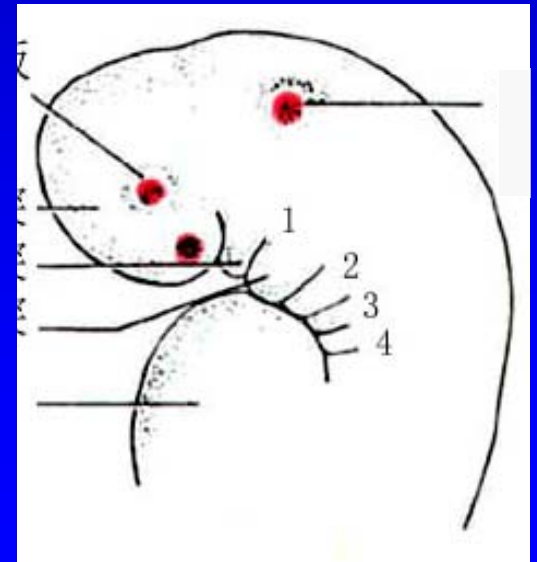
# 鳃器

1. 鳃弓: 6对

2. 鳃沟: 5对

3. 咽囊: 5对

4. 鳃膜: 5对



# 鳃弓和鳃沟的演变

## 1. 鳃弓的演变

第一对鳃弓：上颌突  
下颌突

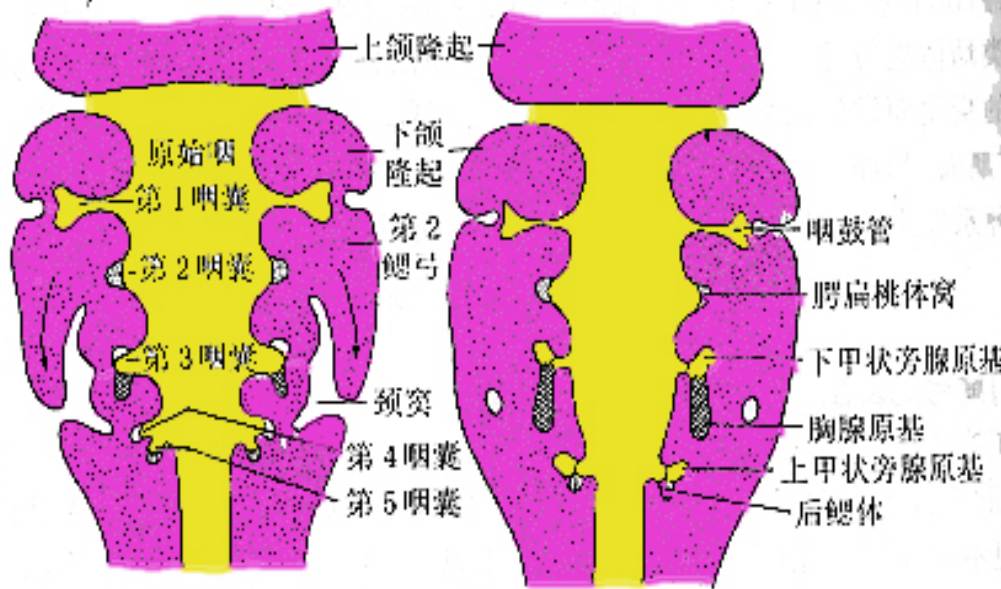
第2,3,4,6对鳃弓：颈部

## 2. 鳃沟的演变：

第一对鳃沟：外耳道

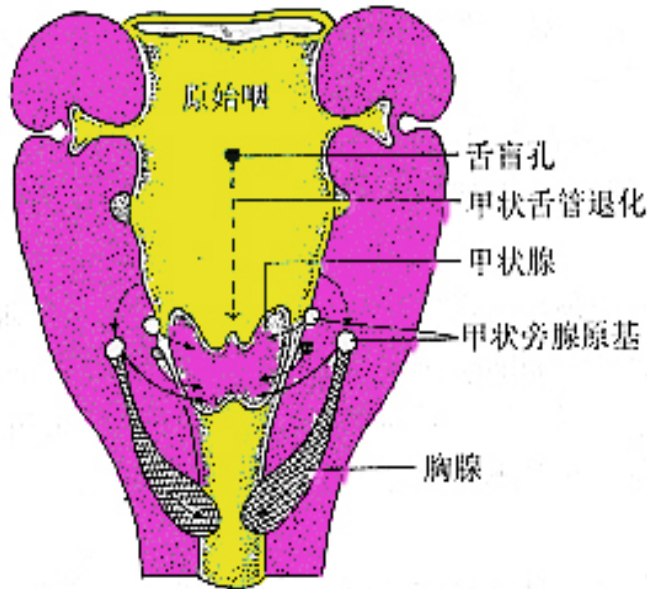
第2,3,4对鳃沟：颈窦 →  
消失，

若不消失，则形成鳃  
痿、颈部囊肿。



A. 5周

B. 6周



C. 7周

# 咽囊的演变

第1对咽囊：中耳鼓室

第2对咽囊：腭扁桃体隐窝

第3对咽囊：

腹侧部分：胸腺

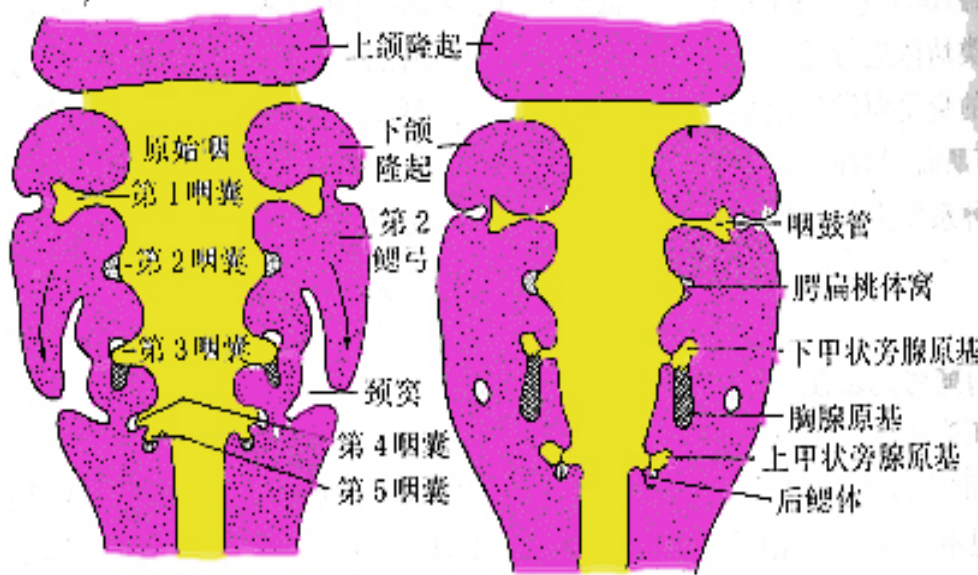
背侧部分：下甲状旁腺

第4对咽囊：

腹侧部分：消失

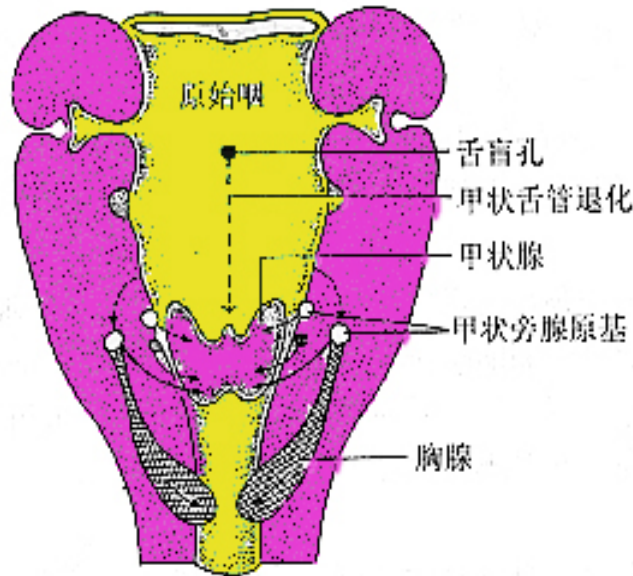
背侧部分：上甲状旁腺

第5对咽囊：后鳃体

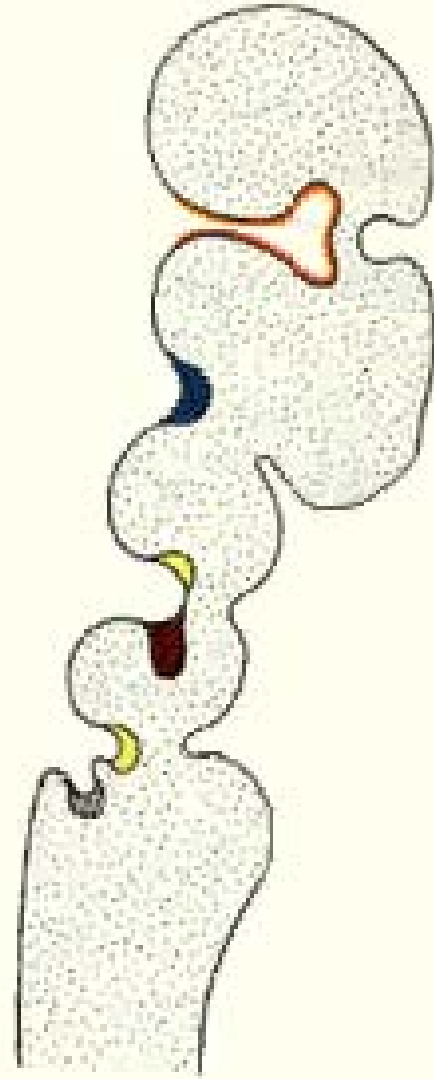
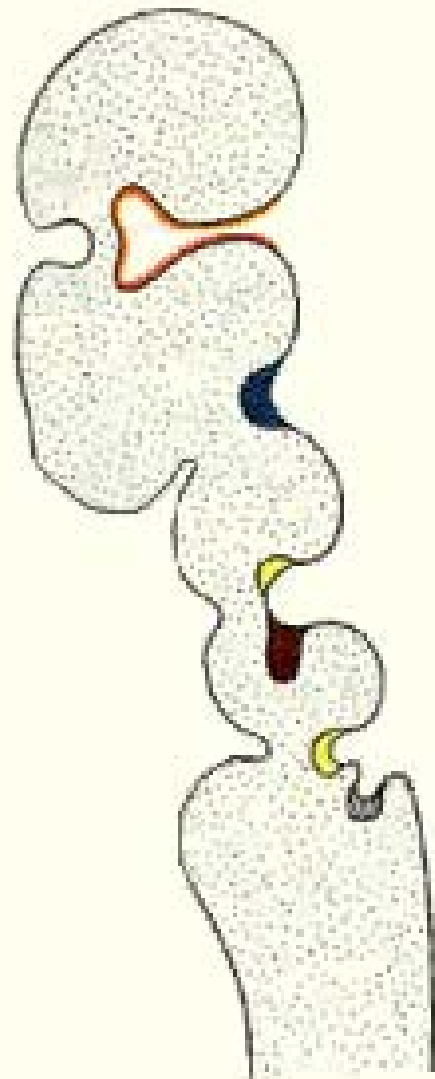


A. 5周

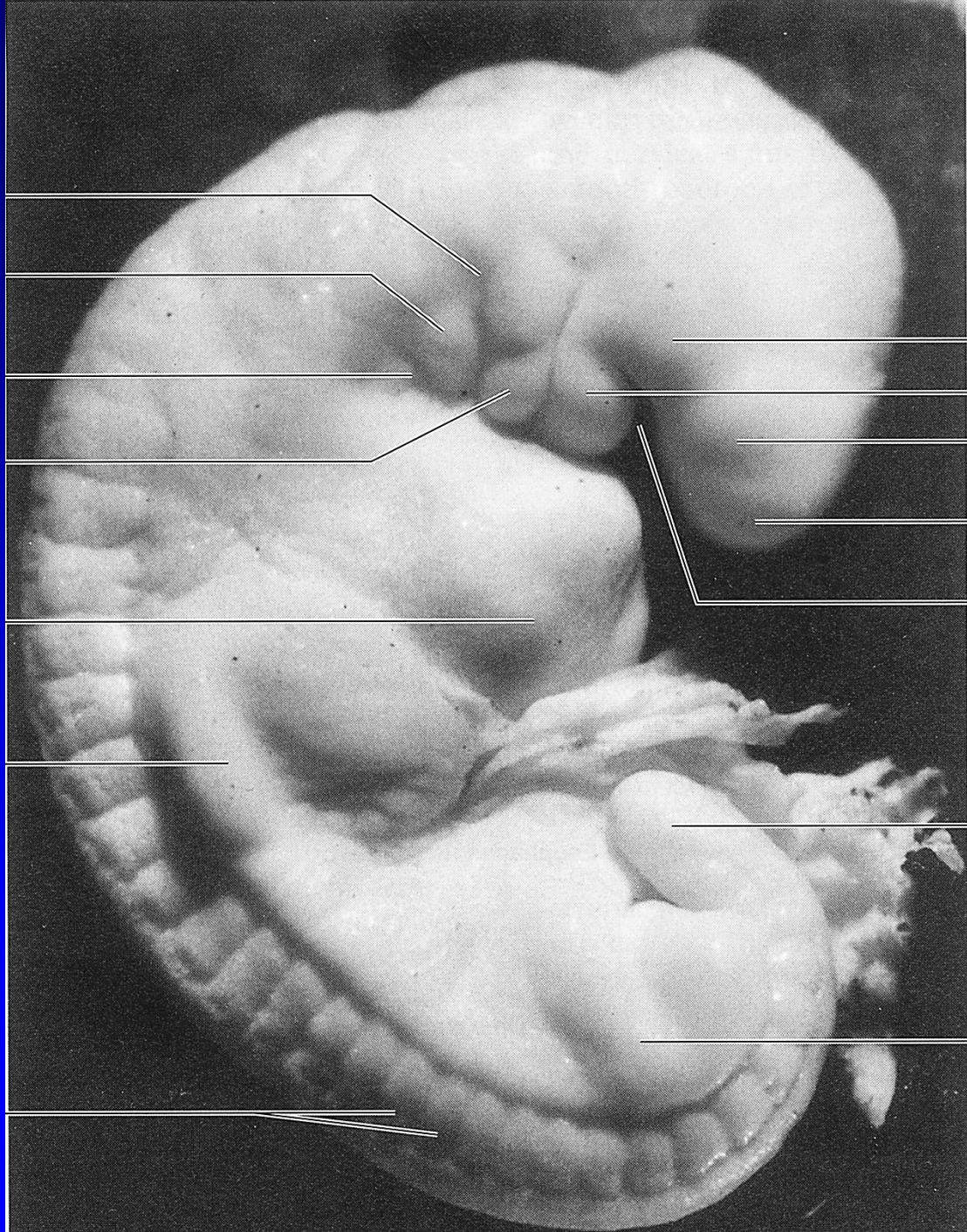
B. 6周

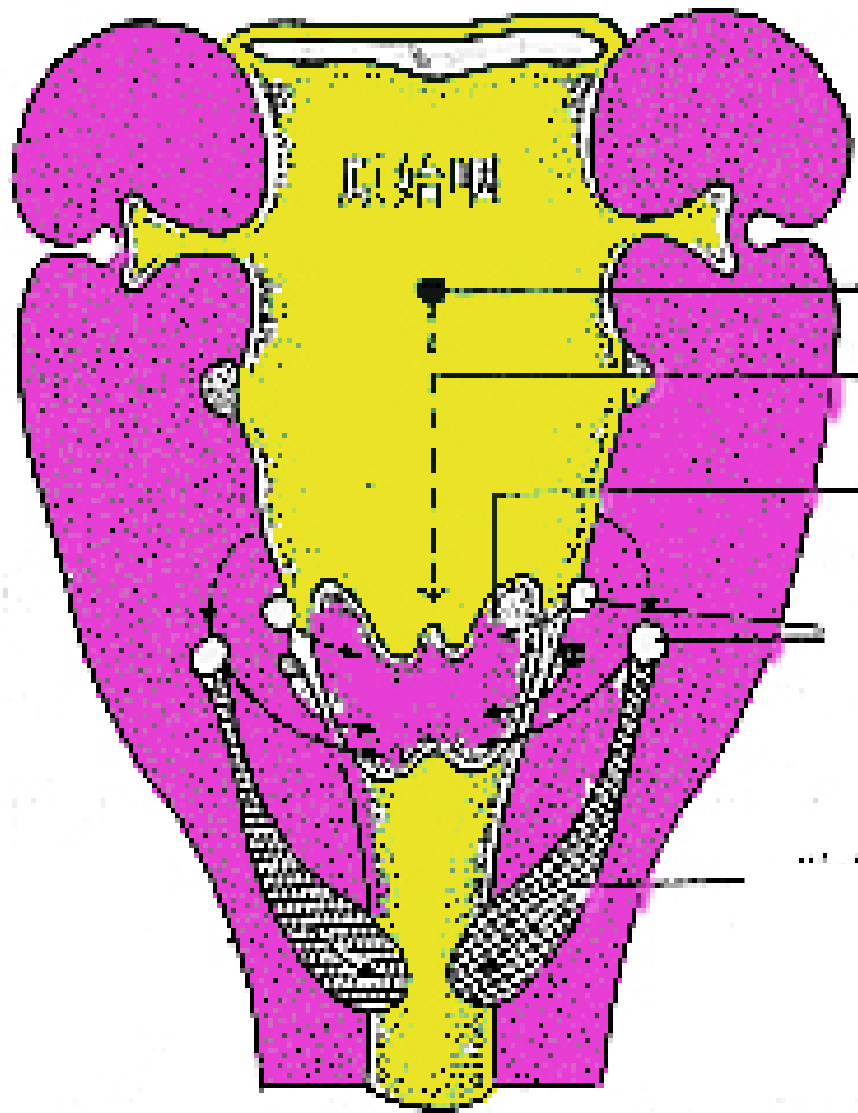


C. 7周



# 颜面的形成





C. 7周

## 甲状腺的发生

原始咽底壁

甲状舌管----->退化

下降

甲状腺

# 甲状腺发生的畸形

- 甲状舌管囊肿：甲状舌管未闭锁。
- 异位甲状腺：甲状腺未下降到颈部。





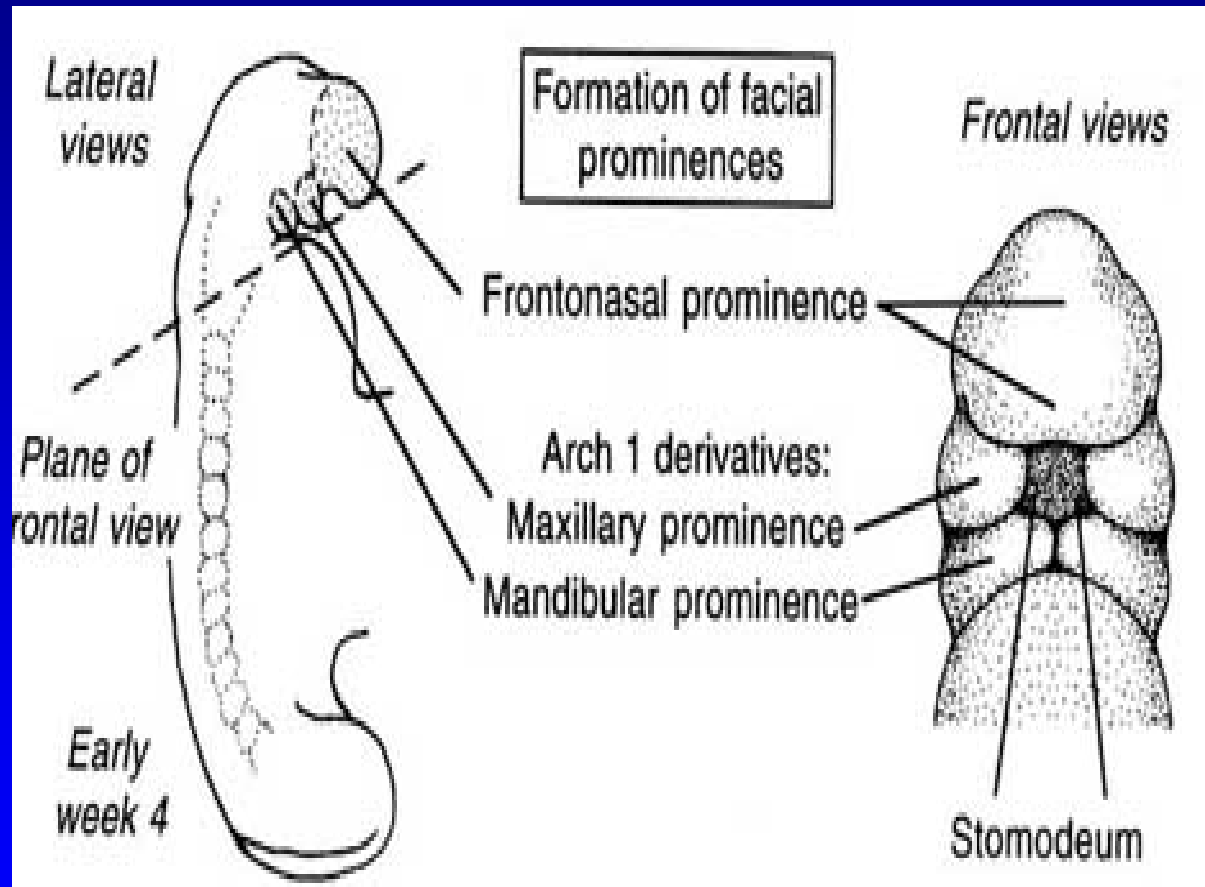
# 1. 人胚的第4周，颜面部形成五个突起：

★额鼻突一个：

★上颌突一对：

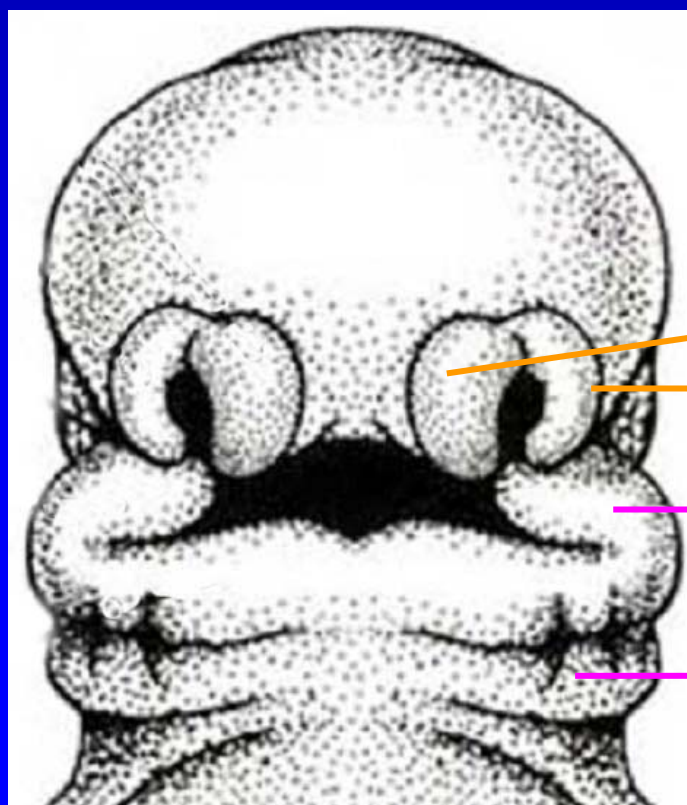
★下颌突一对：

# 2. 口凹



(3) 鼻板：由额鼻突下缘两侧的外胚层组织增生变厚而成。

(4) 鼻窝：由鼻板中央向深部凹陷所形成。鼻窝的两侧突分别称为内侧鼻突和外侧鼻突，鼻窝向深部扩大形成原始鼻腔，与原始口腔相通。



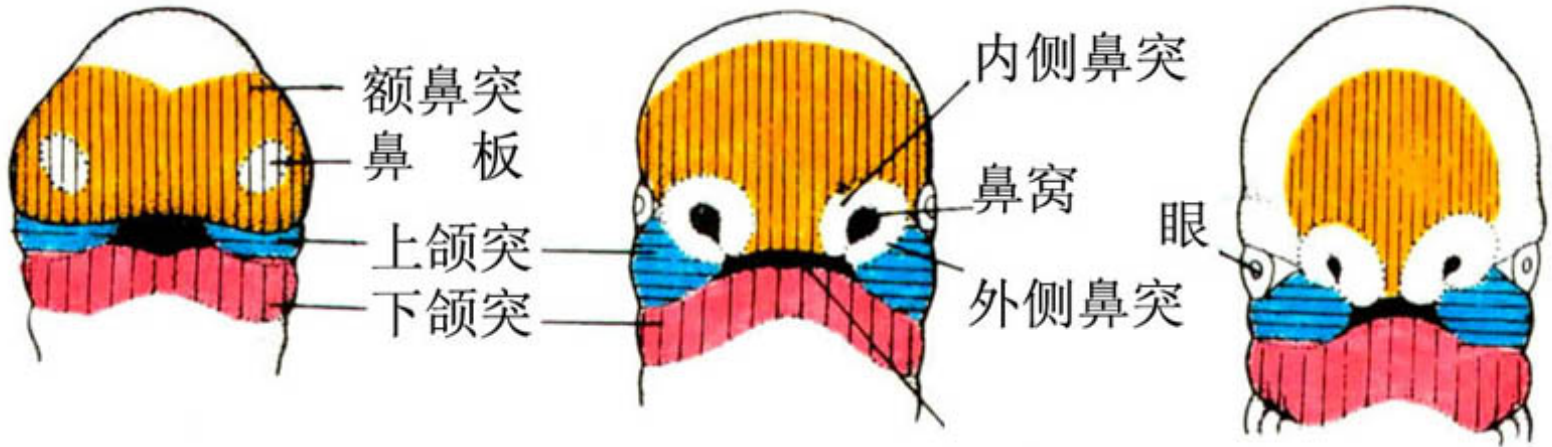
内侧鼻突

外侧鼻突

上颌突

下颌突

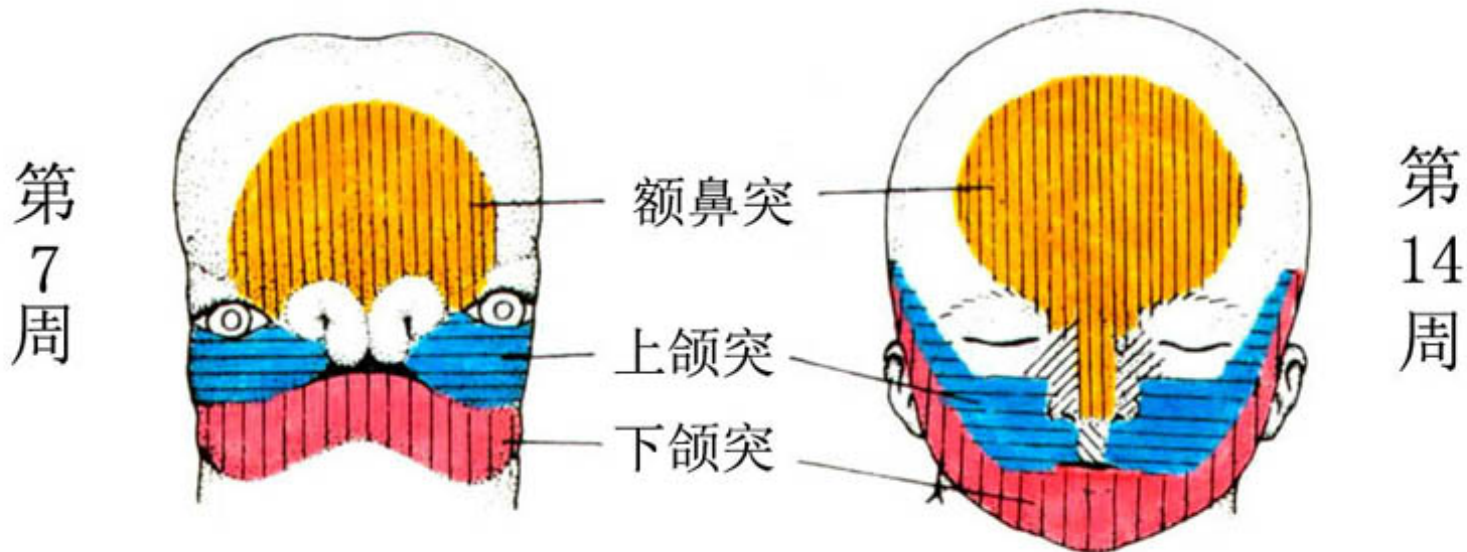
# 颜面发生的演变过程



第4周

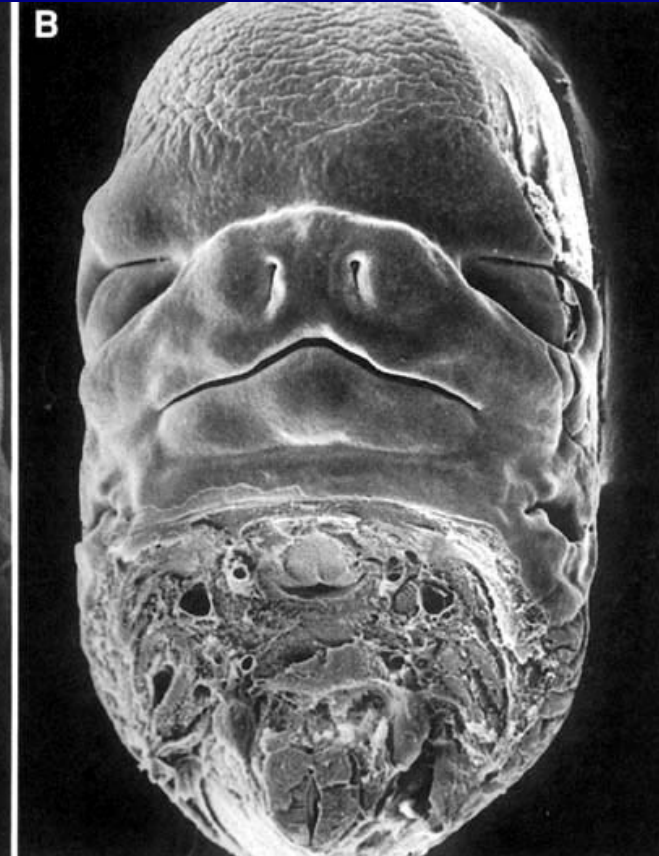
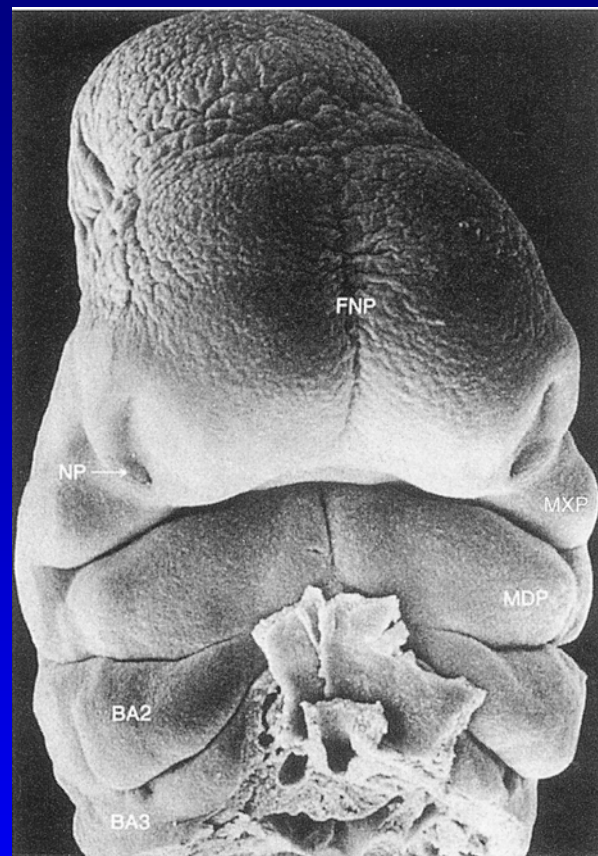
第5周

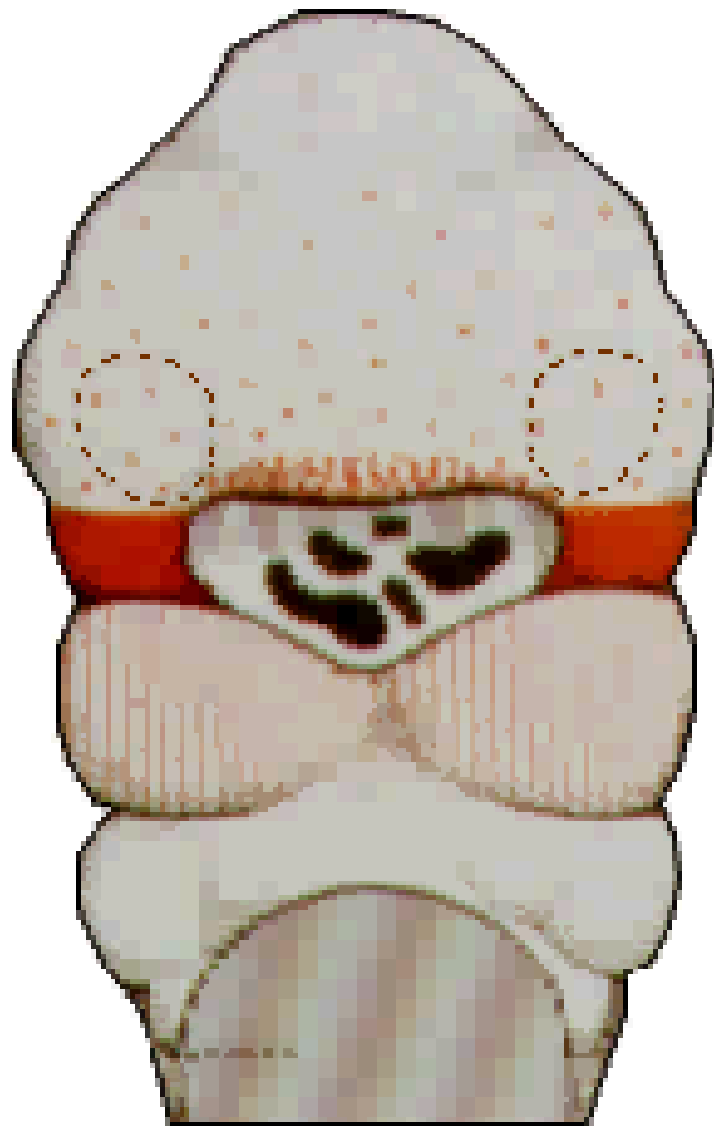
第6周

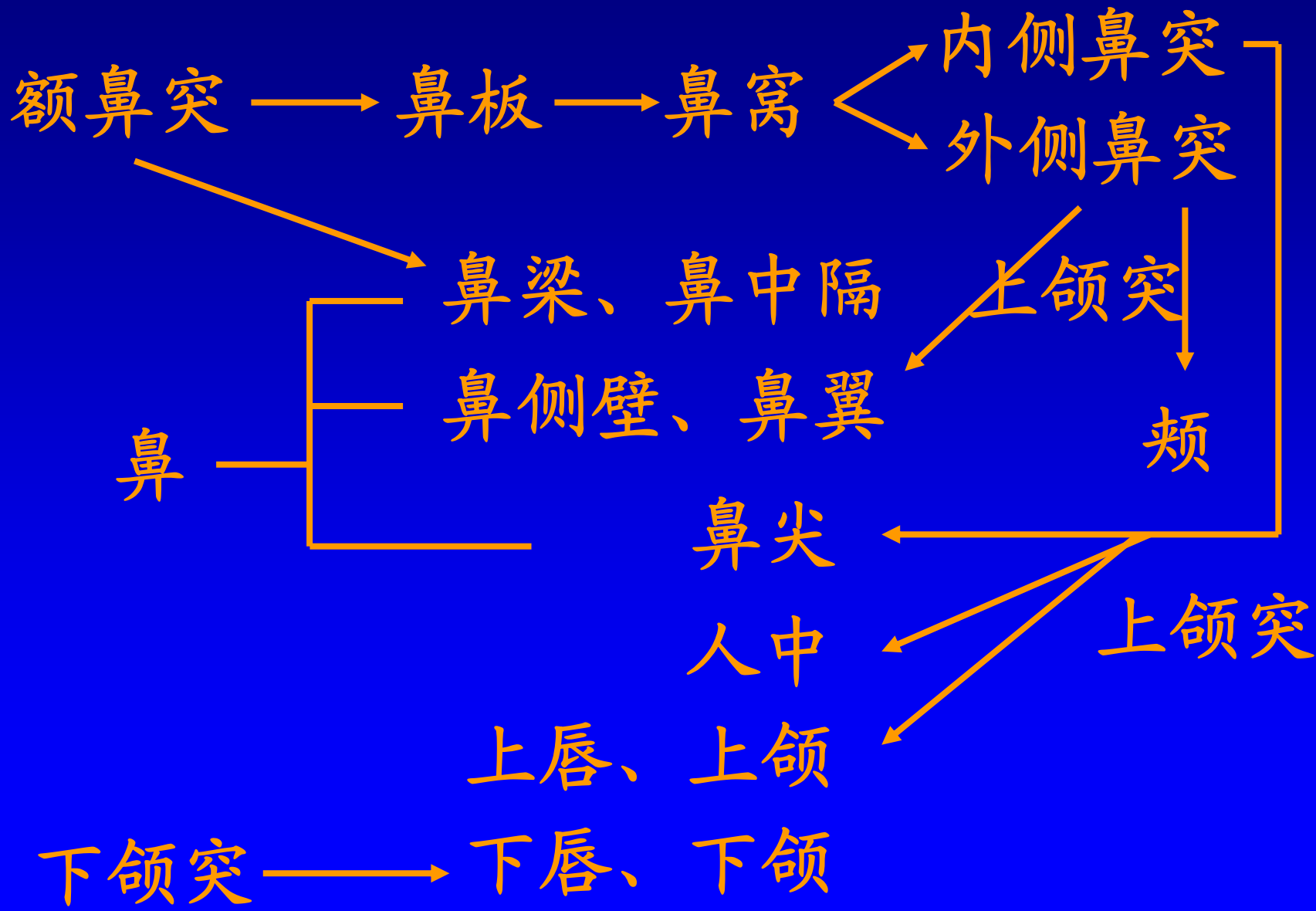


第7周

第14周

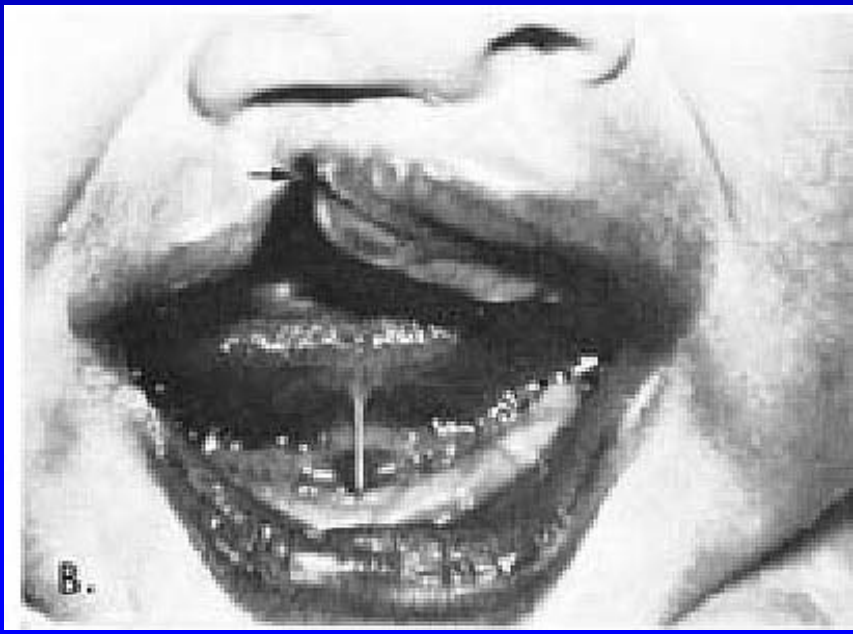






# 颜面的畸形

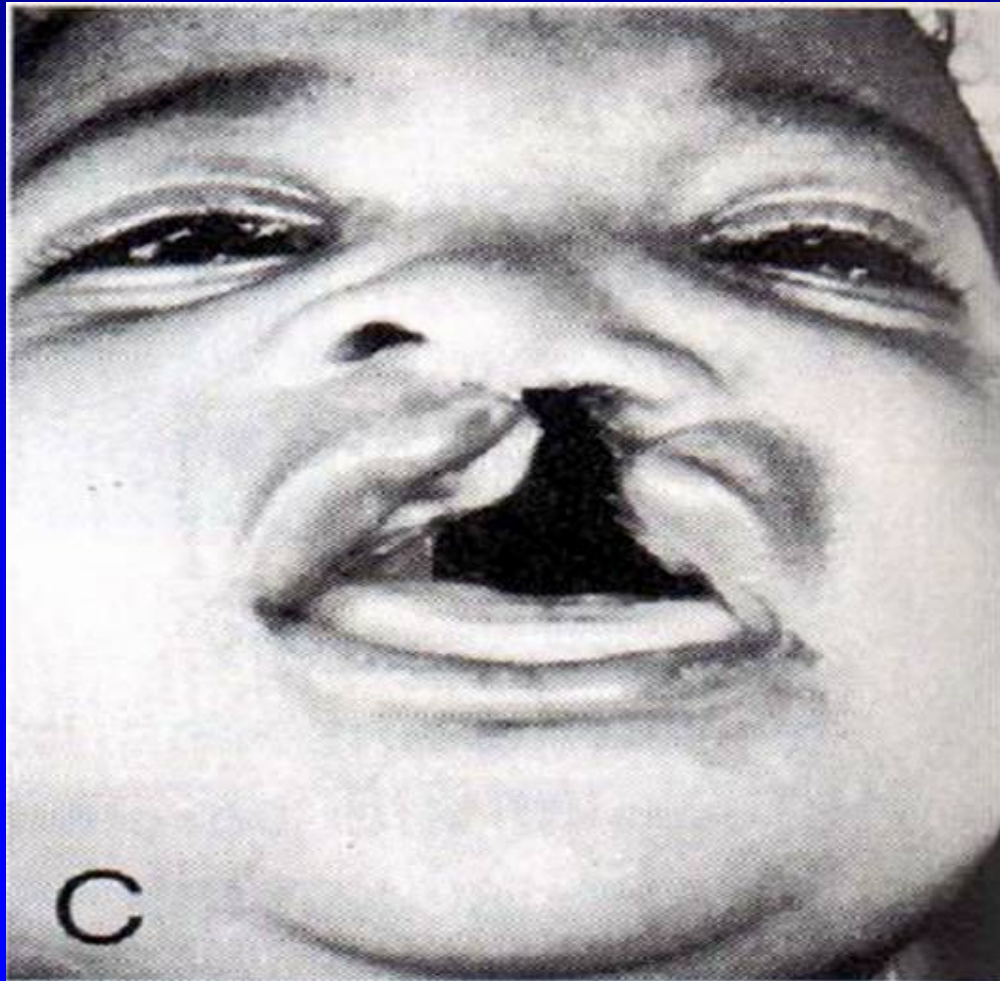
- 唇裂：上颌突与同侧内侧鼻突未愈合（单、双侧）





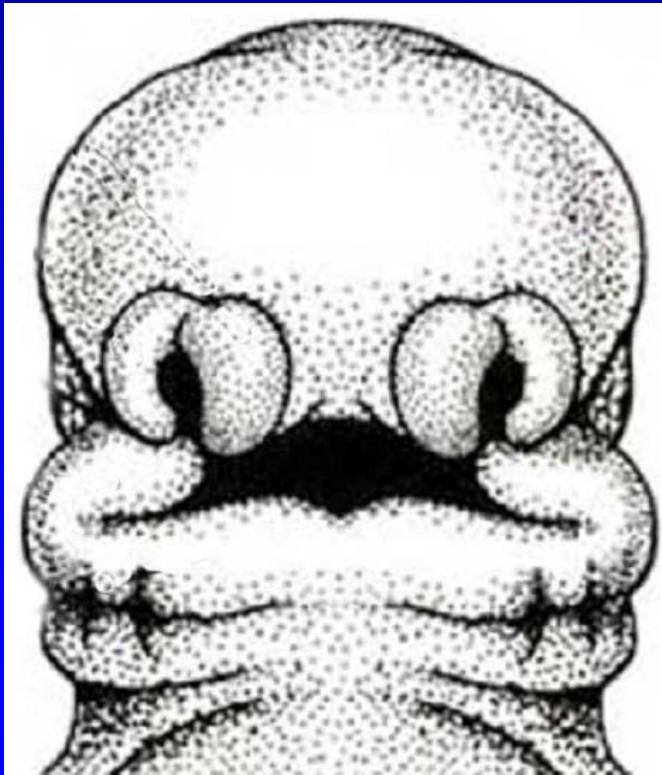
# 唇裂 (cleft lip)

- 上唇正中裂：双侧内侧鼻突未在中线完全融合。

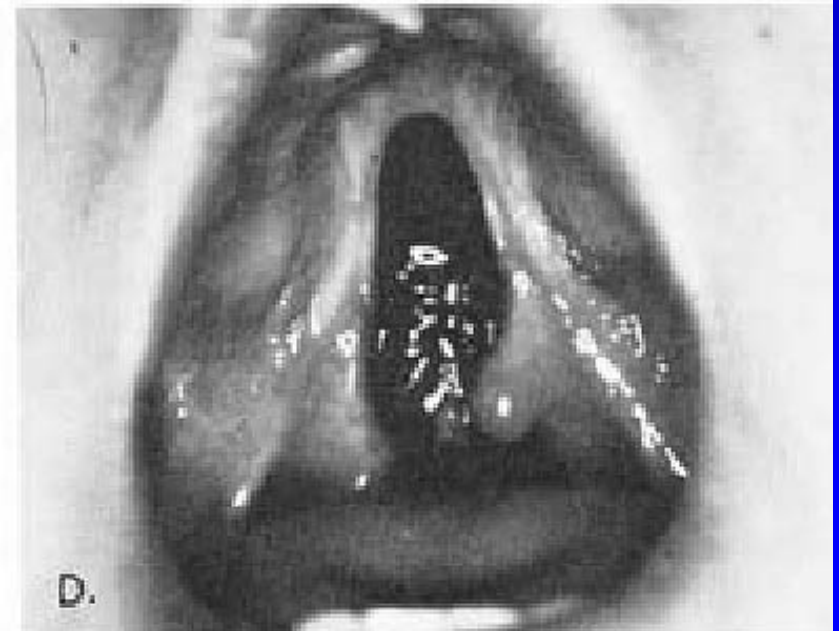
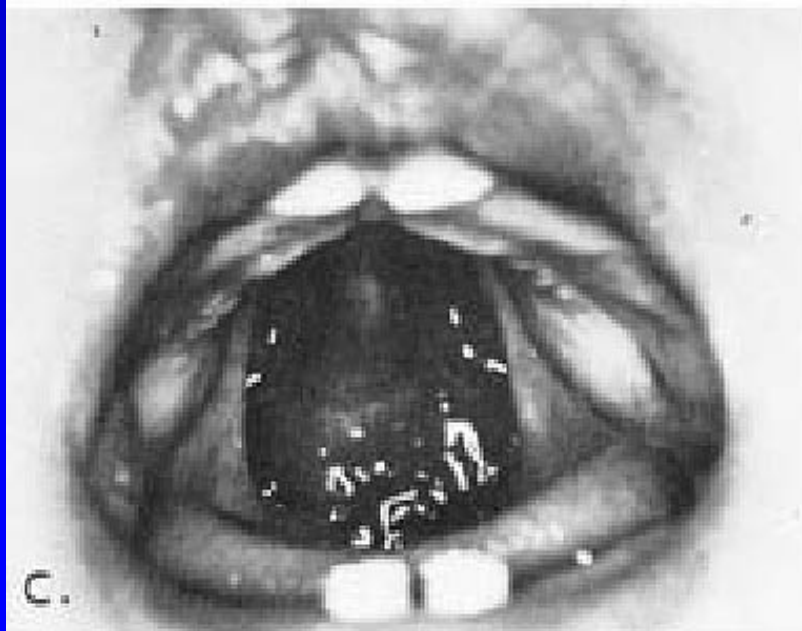
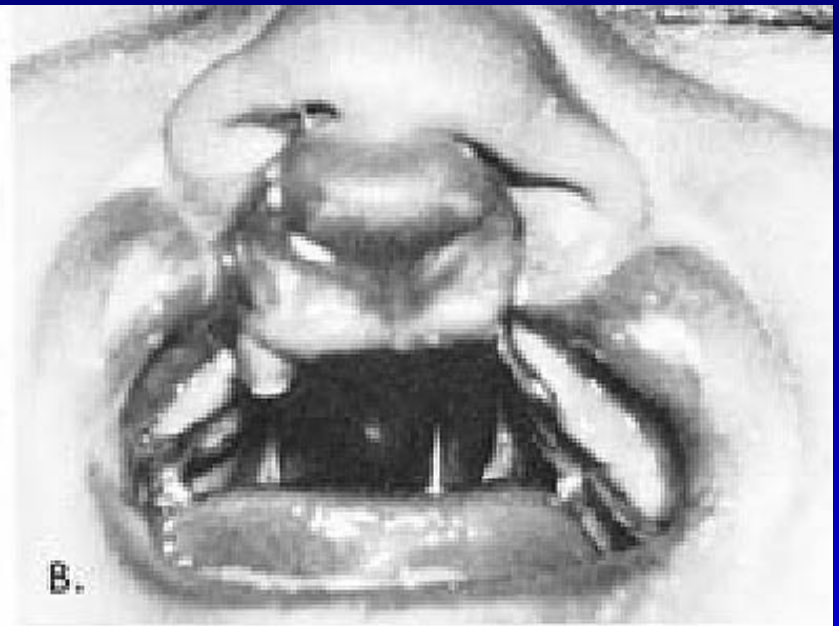


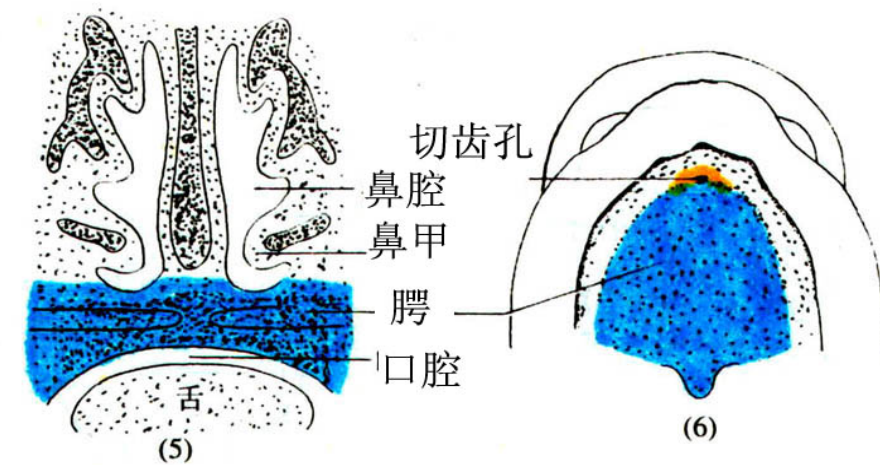
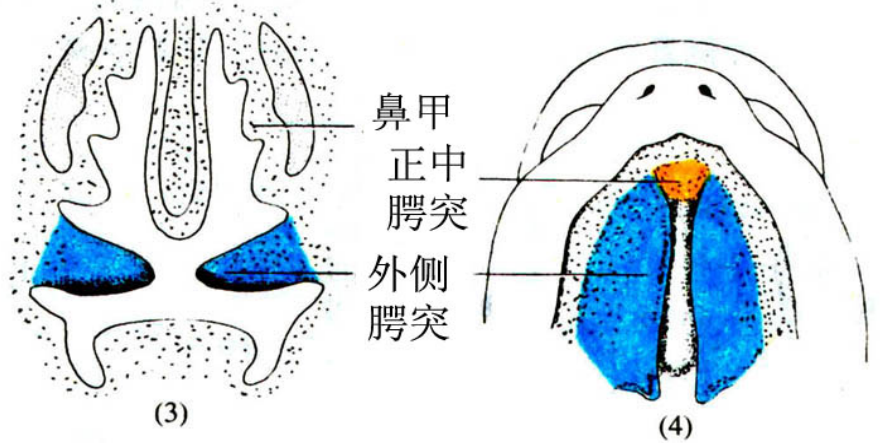
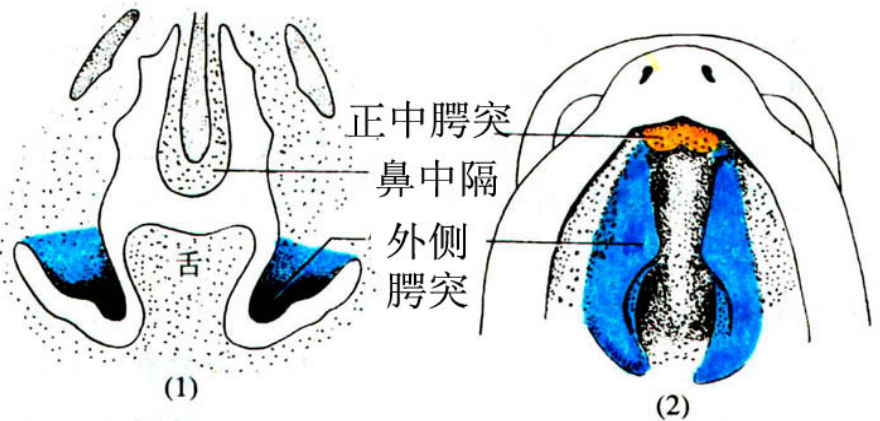
# 面斜裂 (oblique facial cleft)

- 上颌突与同侧外侧鼻突未愈合



# 腭的发生

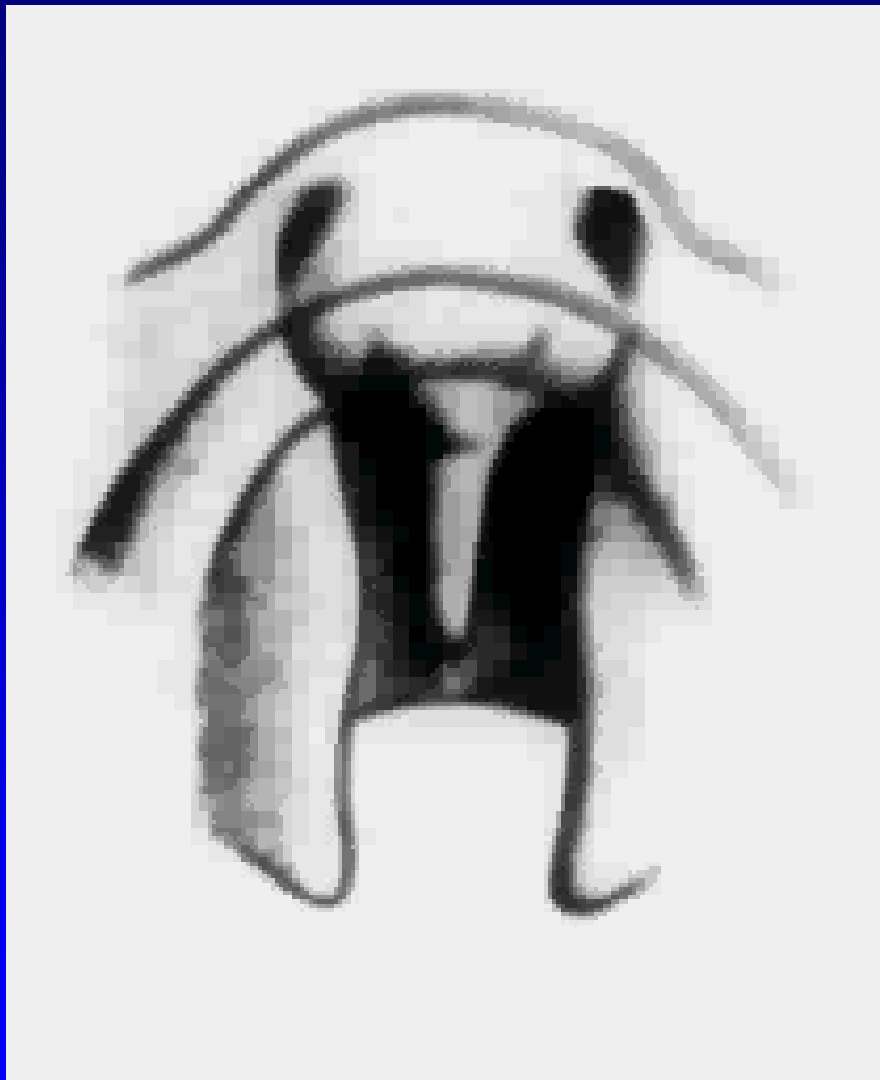
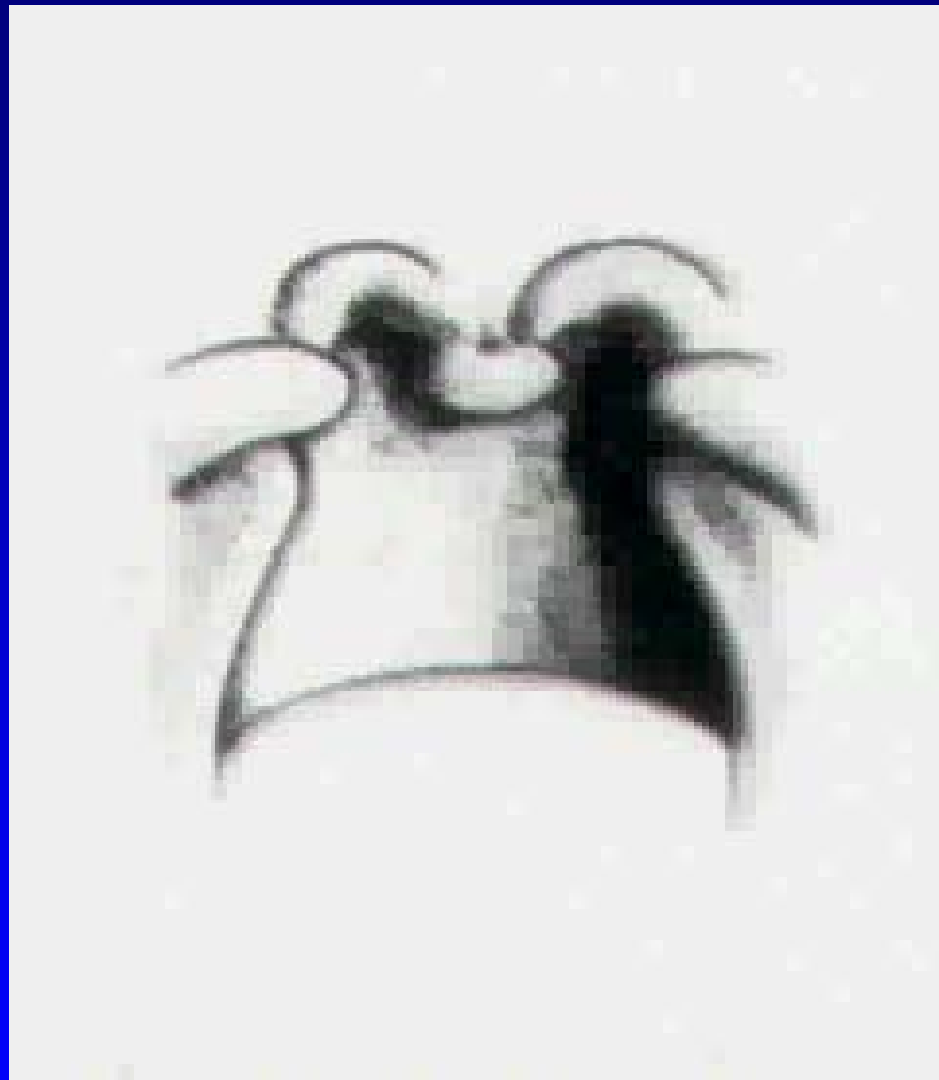




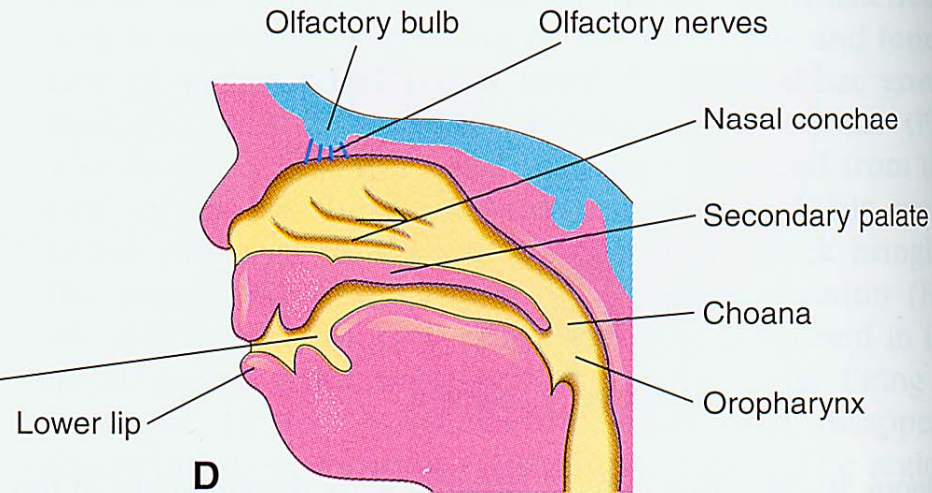
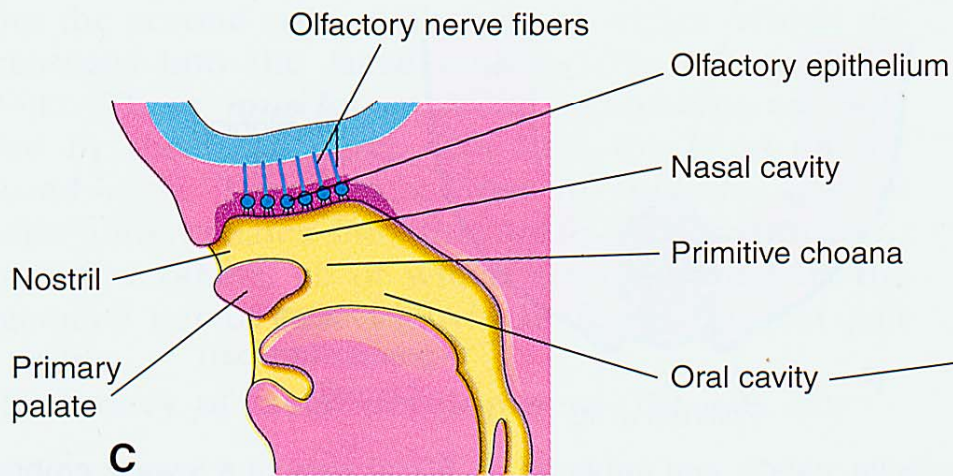
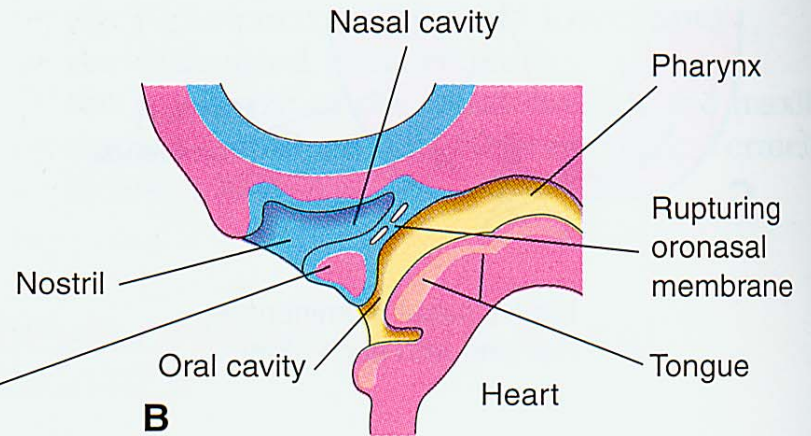
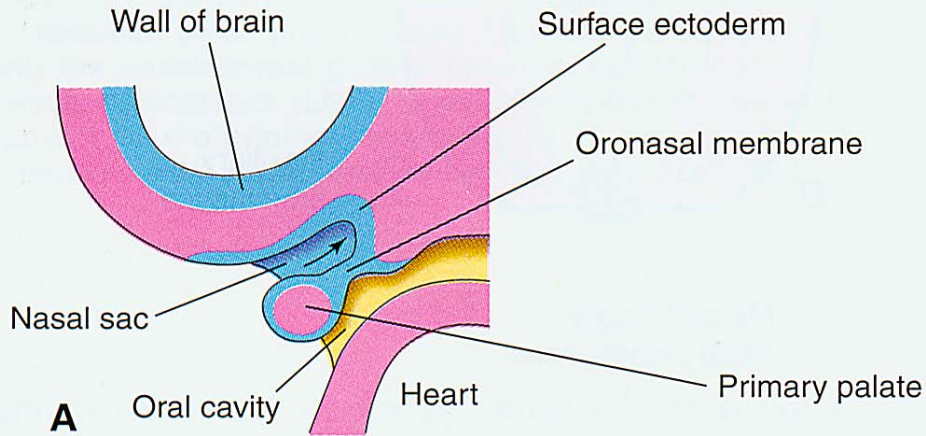
• 内侧鼻突融合处间充质向口腔长出的短小突起 → 正中腭突 → 前腭的小部分

• 上颌突间充质向口腔长出的扁平突起 → 外侧腭突 → 腭的大部分

• 腭形成后将口腔与鼻腔分隔









# 腭裂

- 腭裂：正中腭突与外侧腭突未愈合；左右外侧腭突未愈合

