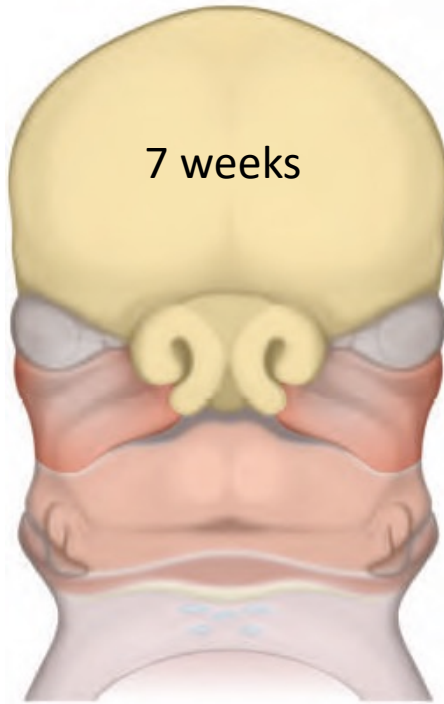


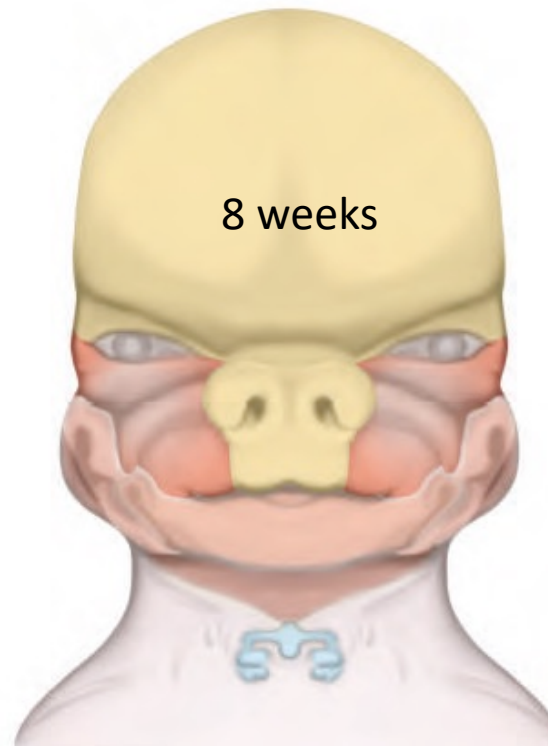
DEVELOPMENT OF FACE AND THROAT



6 weeks



7 weeks



8 weeks



♦ **Processus frontonasalis**

♦ *Processus nasalis medialis*

♦ *Nares*

♦ *Philtrum labii superioris*

♦ *Os incisivum*

♦ **Processus maxillaris**

♦ *maxilla*

♦ **Processus mandibularis**

♦ *Mandibula*

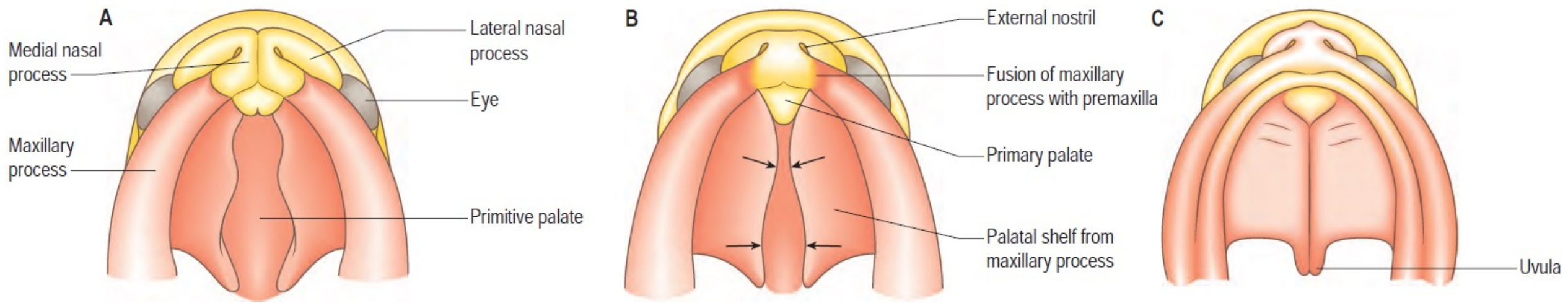
♦ *Auricula (pars superior)*

♦ **Arcus hyoideus**

♦ *Auricula (pars inferior)*

Gray's Anatomy, Elsevier

FACE DEVELOPMENT



- ◆ The front of the palate and the middle part of the upper lip develop from the frontonasal process
- ◆ Middle part of hard palate, soft palate and uvula from maxillary process
- ◆ split
 - ◆ Cheiloschisis – lip
 - ◆ Cheilognathoschisis – lip and maxilla
 - ◆ Choilognathhopalatoschisis – lip, maxilla and palate
 - ◆ Cheilognathopalatouranoschisis – lip, maxilla, palate, uvula

Gray's Anatomy, Elsevier

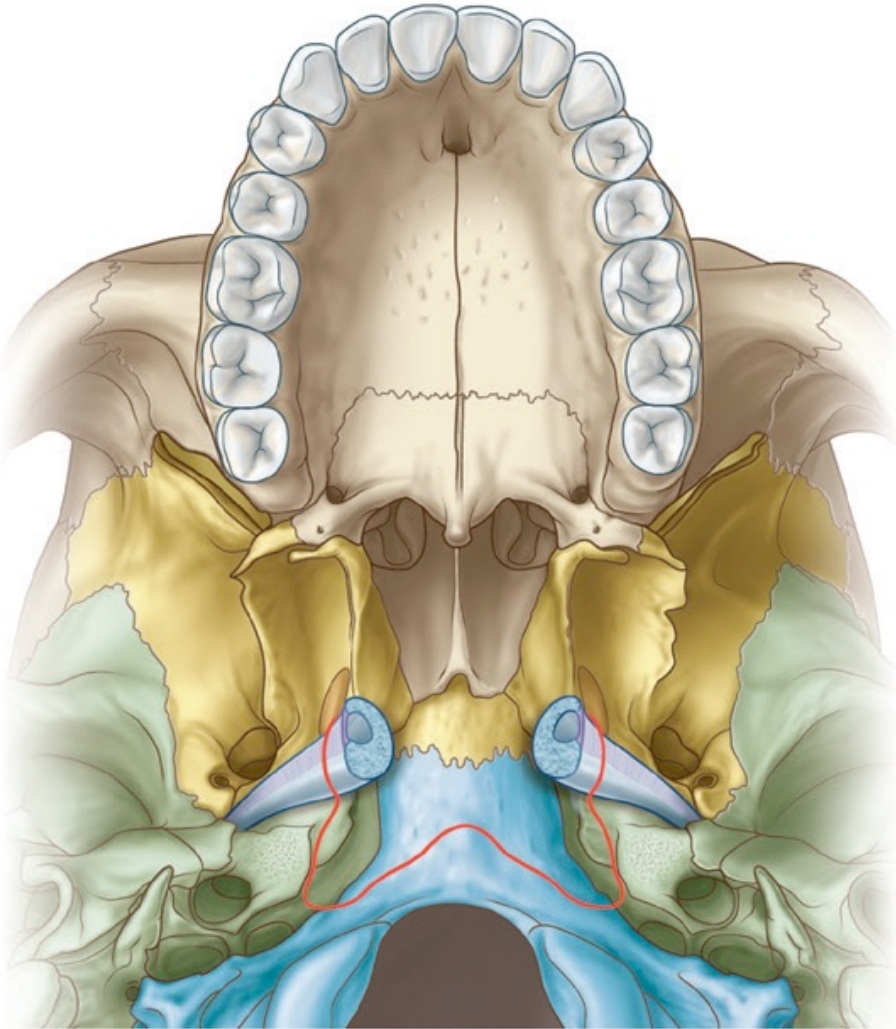
PALATE DEVELOPMENT

🔴 Maxilla

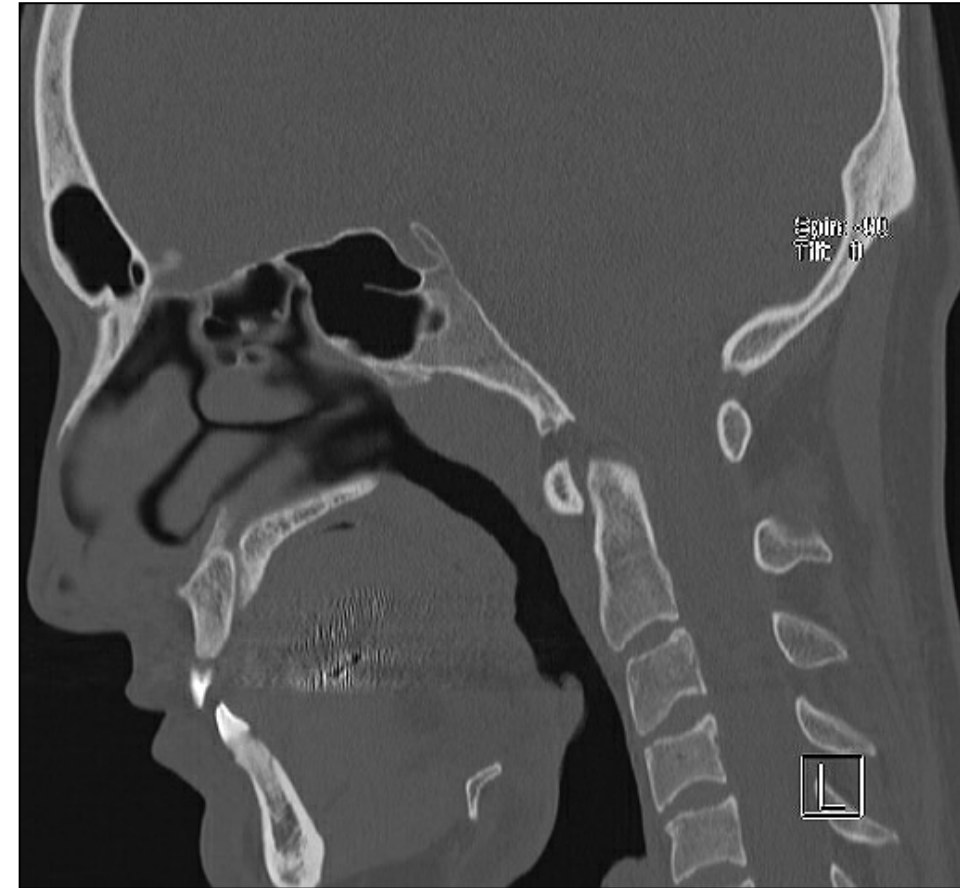
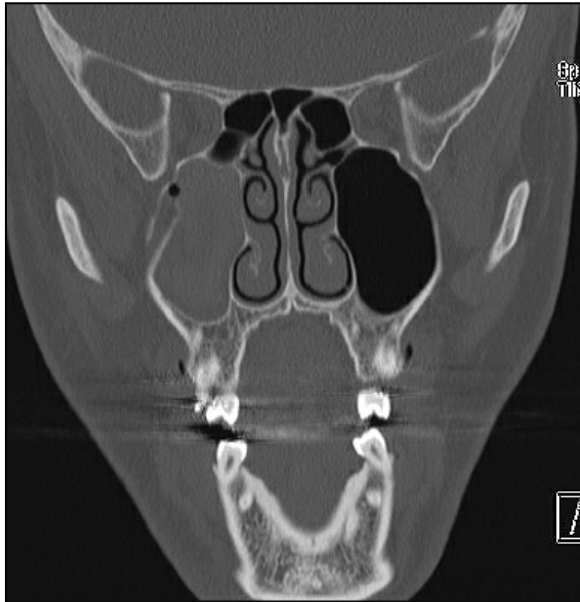
- 🔴 Os incisivum - canalis incisivus

- 🔴 Processu palatinus

🔴 Os palatinum



Gray's Anatomy, Elsevier



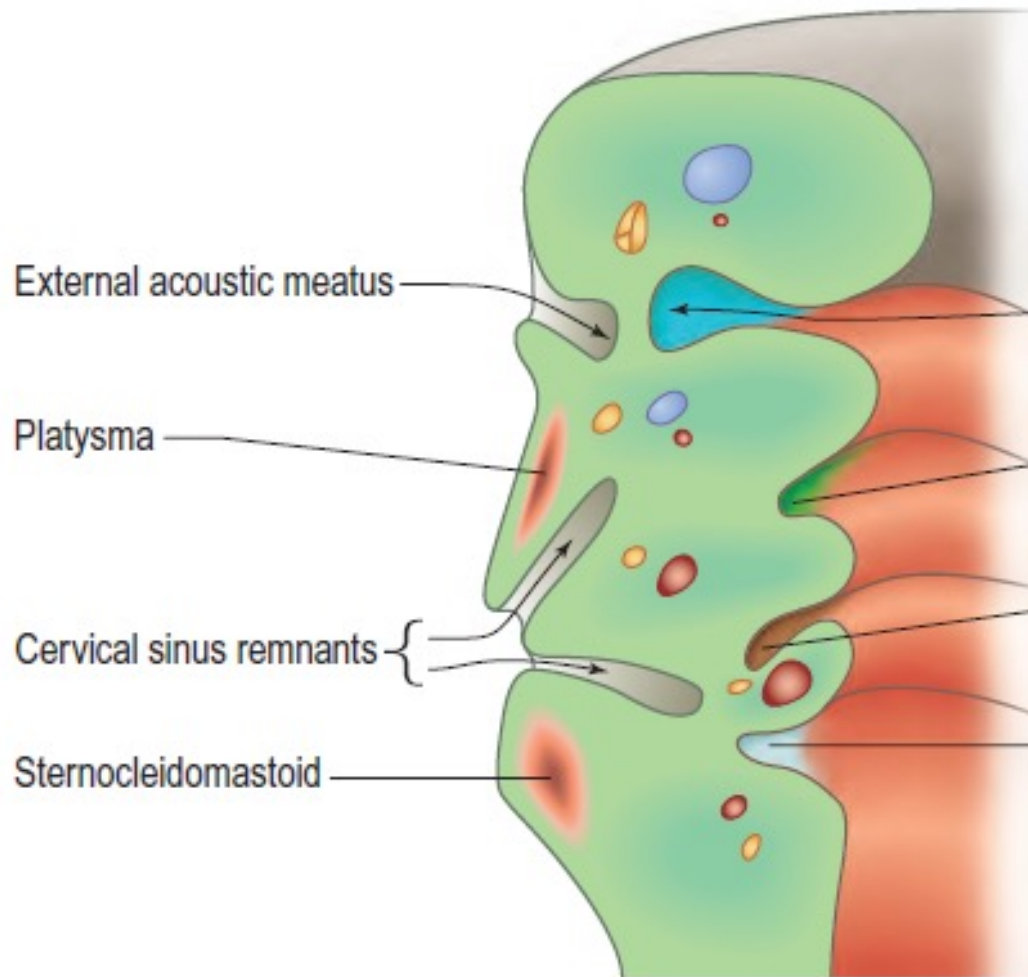
PALATUM DURUM



Gray's Anatomy, Elsevier

- ♦ **Arcus 1 mandibularis**
 - ♦ Incus, malleus, tuberculum geniale
 - ♦ m. tensor tympani, mm. masticatores, m. mylohyoideum, m. digastricus venter anterior, m. tensor veli palatini,
 - ♦ N. trigeminus V3 – m. alveolaris inferior, m. lingualis, arcus aorticus primus
- ♦ **Arcus 2 hyoideus**
 - ♦ Stapes, proc. styloideus, lig. stylohyoideum, cornu minor pars superior ossis hyoidei
 - ♦ M. stapedius, m. stylohyoideus, mm. faciei (mimic), m. digastricus, venter posterior
 - ♦ N. facialis (n. VII), A. stapedia
- ♦ **Arcus 3**
 - ♦ Cornu maior, pars inferior corporis ossis hyoidei
 - ♦ M. stylopharyngeus, N. glossopharyngeus (n. IX) A. carotis communis, prox. A. carotis interna
- ♦ **Arcus 4**
 - ♦ Cart. thyroidea, corniculatum, cuneiformis,
 - ♦ Mm. pharyngeales, mm. laryngis externi, m. levator veli palatini
 - ♦ N. vagus (X) – pars pharyngealis, pars proximalis a. subclavia dx., arcus aortae
- ♦ **Arcus 6**
 - ♦ Cart. arytenoides, mm laryngis interni, n. vagus (X) n. recurrens, ductus arteriosus sin)

BRANCHIAL ARCHES

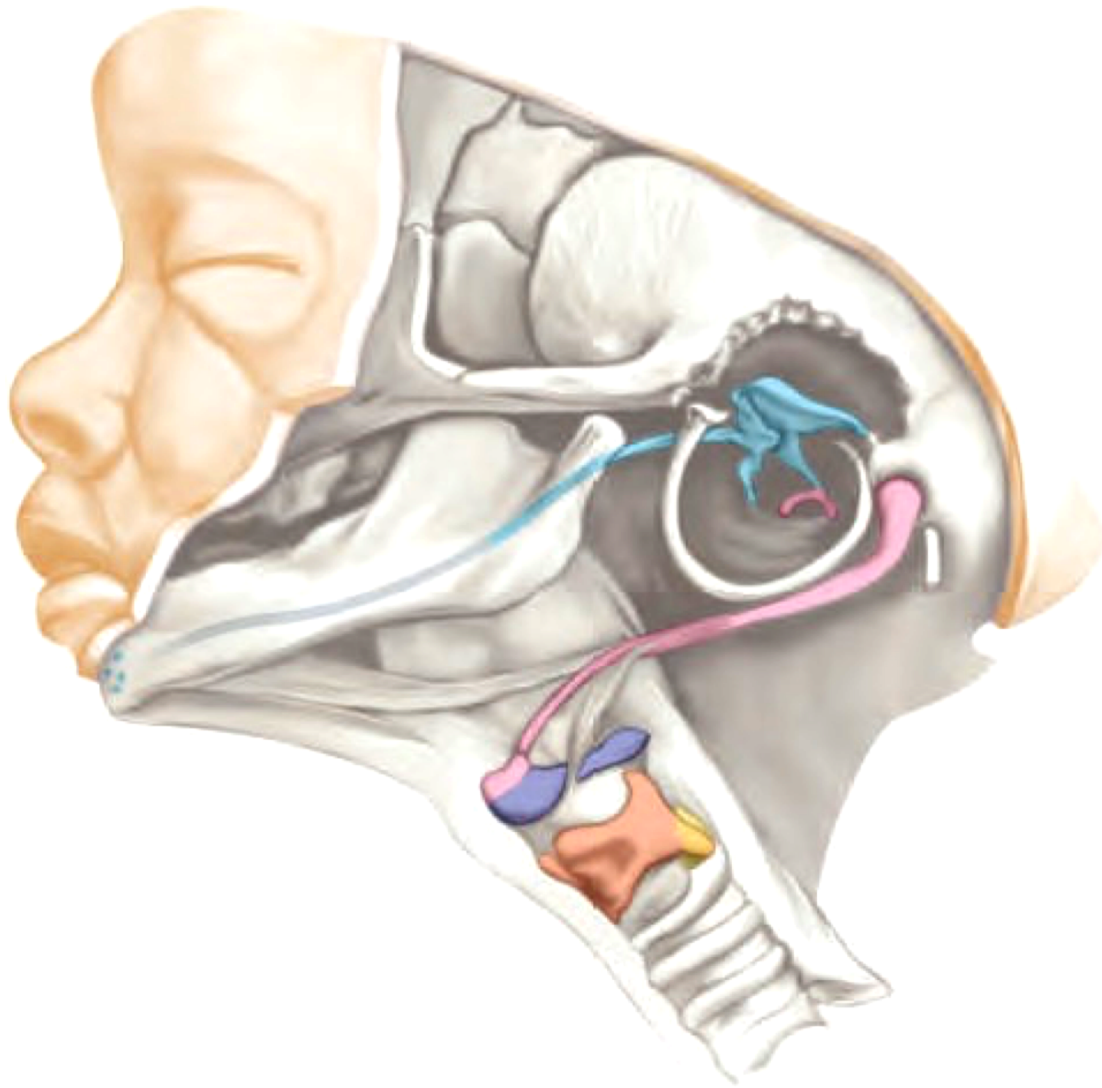


Gray's Anatomy, Elsevier

♦ Deriváty žaberních výchlipek

- ♦ *Epitel žaberních výchlipek*
- ♦ *Neurální lišta*
- ♦ *Mesenchymální deriváty neurální lišty*
- ♦ **1. Tuba pharyngotympanica + membrána tympani**
- ♦ **2. Tonsilla palatina**
- ♦ **3. Thymus + gll. parathyroideae (inferiores)**
- ♦ **4. Gll. parathyroideae (sup) + gl. thyroidea (pars lateralis)**

BRACHIAL STRUCTURES - GLANDS



♦ Arcus 1 mandibularis

- ♦ *Incus*
- ♦ *Malleus*
- ♦ *Tuberculum geniale*

♦ Arcus 2 hyoideus

- ♦ *stapes*
- ♦ *proc. styloideus, lig. stylohyoideum,*
- ♦ *cornu minor pars superior ossis hyoidei*

♦ Arcus 3

- ♦ *Cornu maior ossis hyoidei*
- ♦ *pars inferior corporis ossis hyoidei*

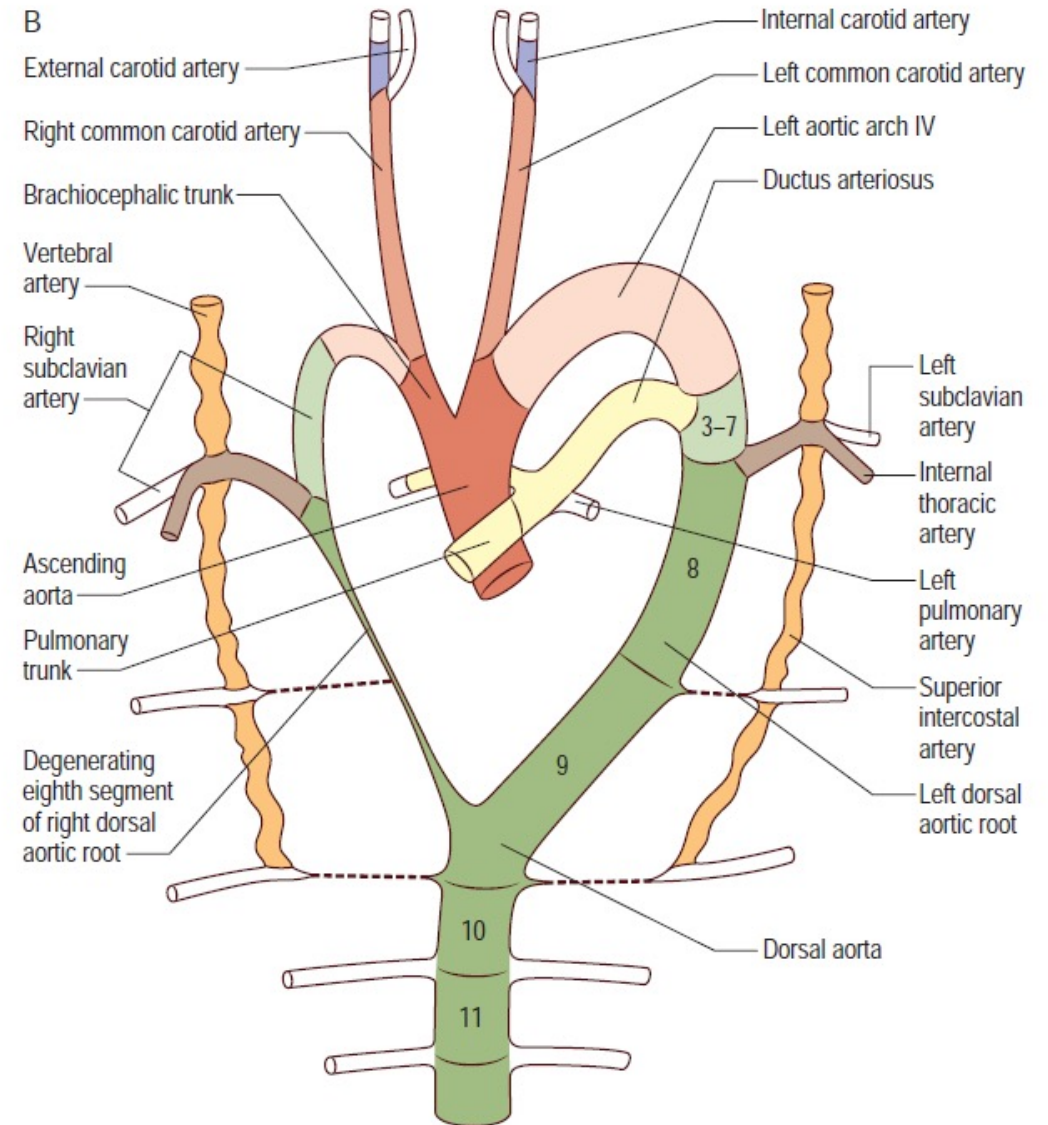
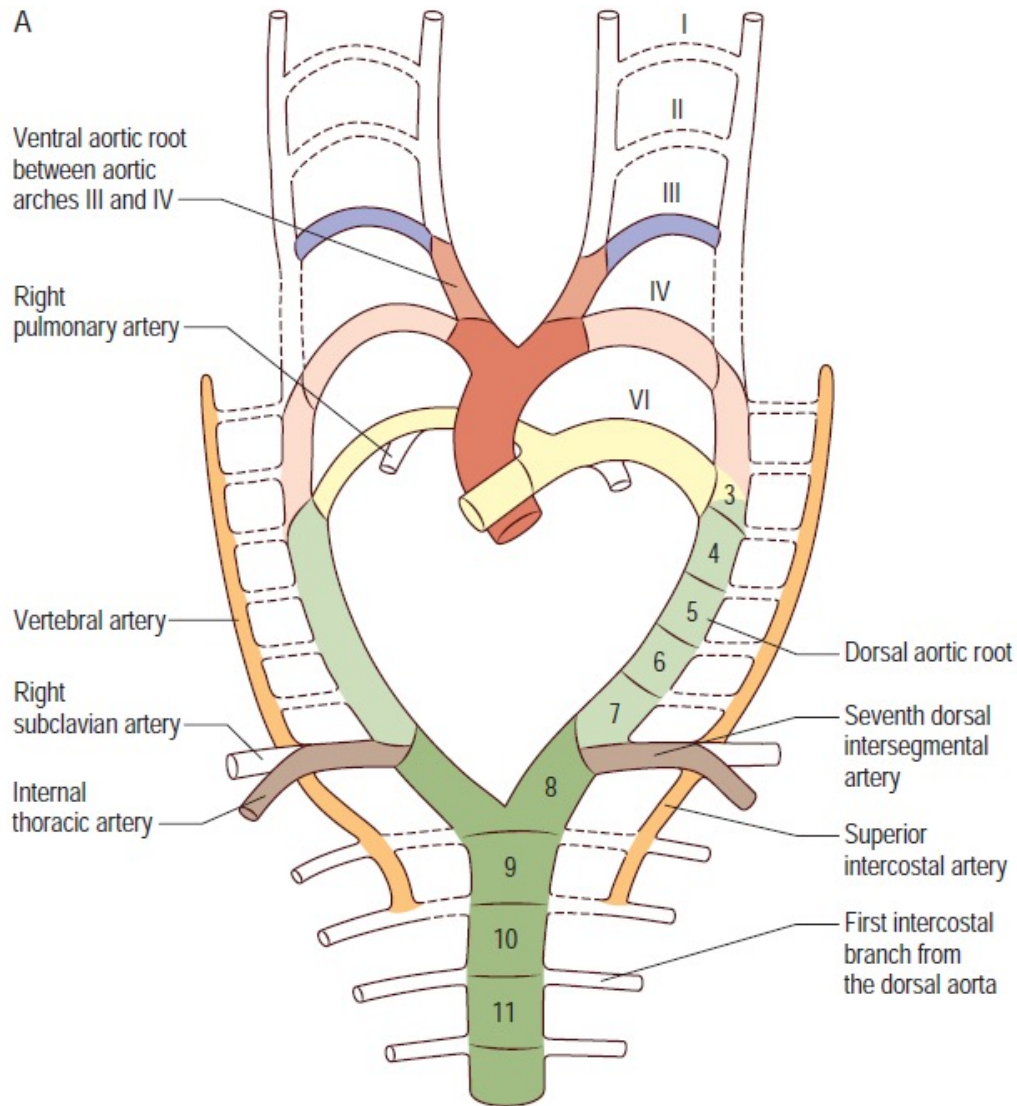
♦ Arcus 4

- ♦ *Cart. thyroidea, corniculatum, cuneiformis,*

♦ Arcus 6

- ♦ *Cart. arytenoides, mm laryngis interni, n. vagus (X) n. recurrens, ductus arteriosus sin.*

BRANCHIAL STRUCTURES – BONES AND CARTILAGES



BRANCHIAL STRUCTURES - ARTERIES

VÝVOJ OBLIČEJE A HRDLA