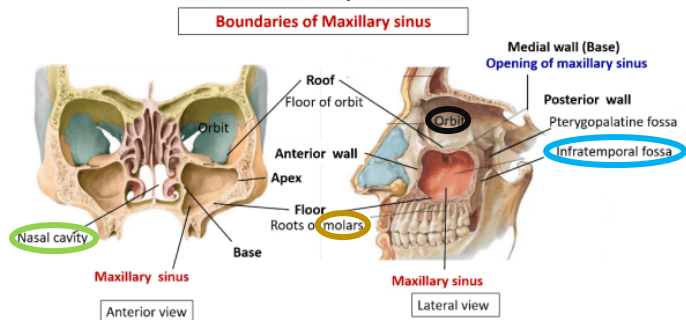
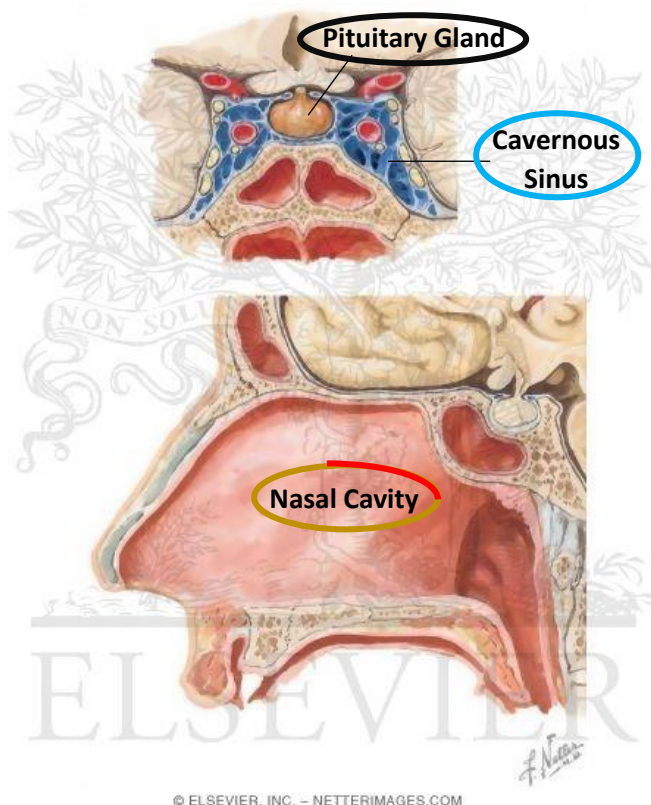


❖ Relations of Maxillary Sinus:



Black=Superior, Gold=Inferior, Blue=Lateral, Green=Medial

❖ Relations of the Sphenoidal Sinus:



Black=Superior, Gold=Inferior, Blue=Lateral, Red=Anterior

❖ Nerve Supply of the Paranasal Sinuses:

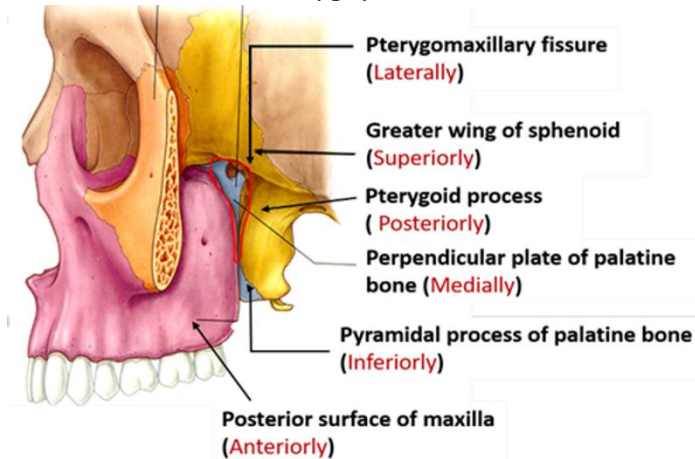
Frontal Sinuses= Supraorbital nerve from ophthalmic nerve

Ethmoidal Sinuses= Anterior and posterior ethmoidal branches of nasociliary nerve from ophthalmic nerve

Maxillary Sinuses= Infraorbital and alveolar branches from maxillary nerve

Sphenoidal Sinuses= Posterior ethmoidal nerve from ophthalmic nerve + Orbital branches from maxillary nerve

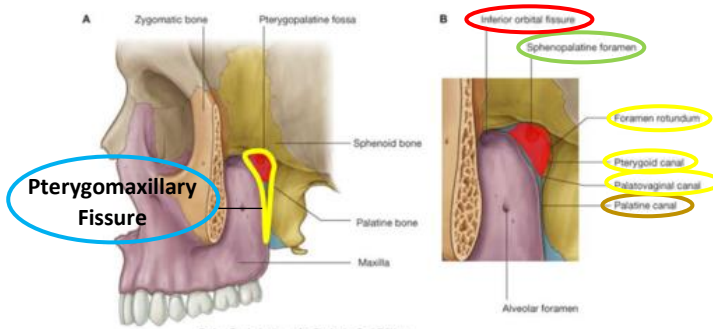
❖ Boundaries of Pterygopalatine Fossa:



[NOTE: Laterally is the pterygomaxillary fissure, and consequently, the infratemporal fossa]

❖ Communications of Pterygopalatine Fossa with other locations:

Pterygopalatine Fossa via Pterygomaxillary Fissure



Gold=Inferior (Palatine canal to the oral cavity), **Blue=Lateral** (Pterygomaxillary fissure to the infratemporal fossa), **Green=Medial** (Sphenopalatine foramen to the lateral wall of nasal cavity), **Red=Anterior** (Inferior orbital fissure to the orbit), **Yellow=Posterior** (Foramen rotundum to the middle cranial fossa/ Pterygoid canal to foramen lacerum [and consequently the middle cranial fossa]/ Palatovaginal canal to the nasopharynx)

❖ Contents of Pterygopalatine Fossa:

- ✓ 3rd part of the maxillary artery
- ✓ Nerve of the pterygoid canal (Greater petrosal nerve [parasympathetic] from geniculate ganglia of facial nerve + Deep petrosal nerve [sympathetic] from superior cervical sympathetic ganglia)
- ✓ Veins and lymphatics

✓ Maxillary nerve (which branches are:)

- ✧ Meningeal -before it enters the fossa-
- ✧ Two ganglionic branches pass through the pterygopalatine ganglion (Postganglionic parasympathetic fibers and sensory)
- ✧ Zygomatic nerve
- ✧ Posterior superior alveolar nerve (for molars)
- ✧ Infra-orbital nerve (which gives: ▪before exit: [middle superior alveolar nerve (for premolars) and anterior superior alveolar nerve (for incisors and canine)], ▪after exit [palpebral, labial and nasal nerves])

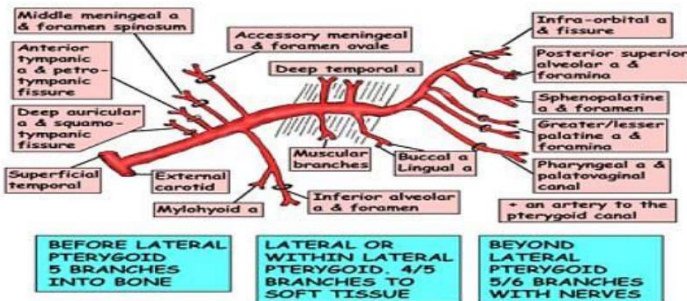
✓ Pterygopalatine ganglion (which branches are:)

- ✧ Pharyngeal branch
- ✧ Palatine nerve
- ✧ Nasal nerves: long sphenopalatine (nasopalatine nerve) to the septum, and short sphenopalatine (posterior superior lateral nerve) to the lateral wall
- ✧ Orbital branches
- ✧ Zygomatic branch: zygomaticofacial and zygomaticotemporal

➔ Maxillary Artery:

MAXILLARY ARTERY

In infratemporal fossa, either within or lateral to the superficial head of lateral pterygoid muscle. This muscle is shown below



Done by: *Abdullah Al-Jaouni*

شو بصير عليك لو دعتي دعوة ثانية > 3

ربي يوفقكم وييسر أمركم..