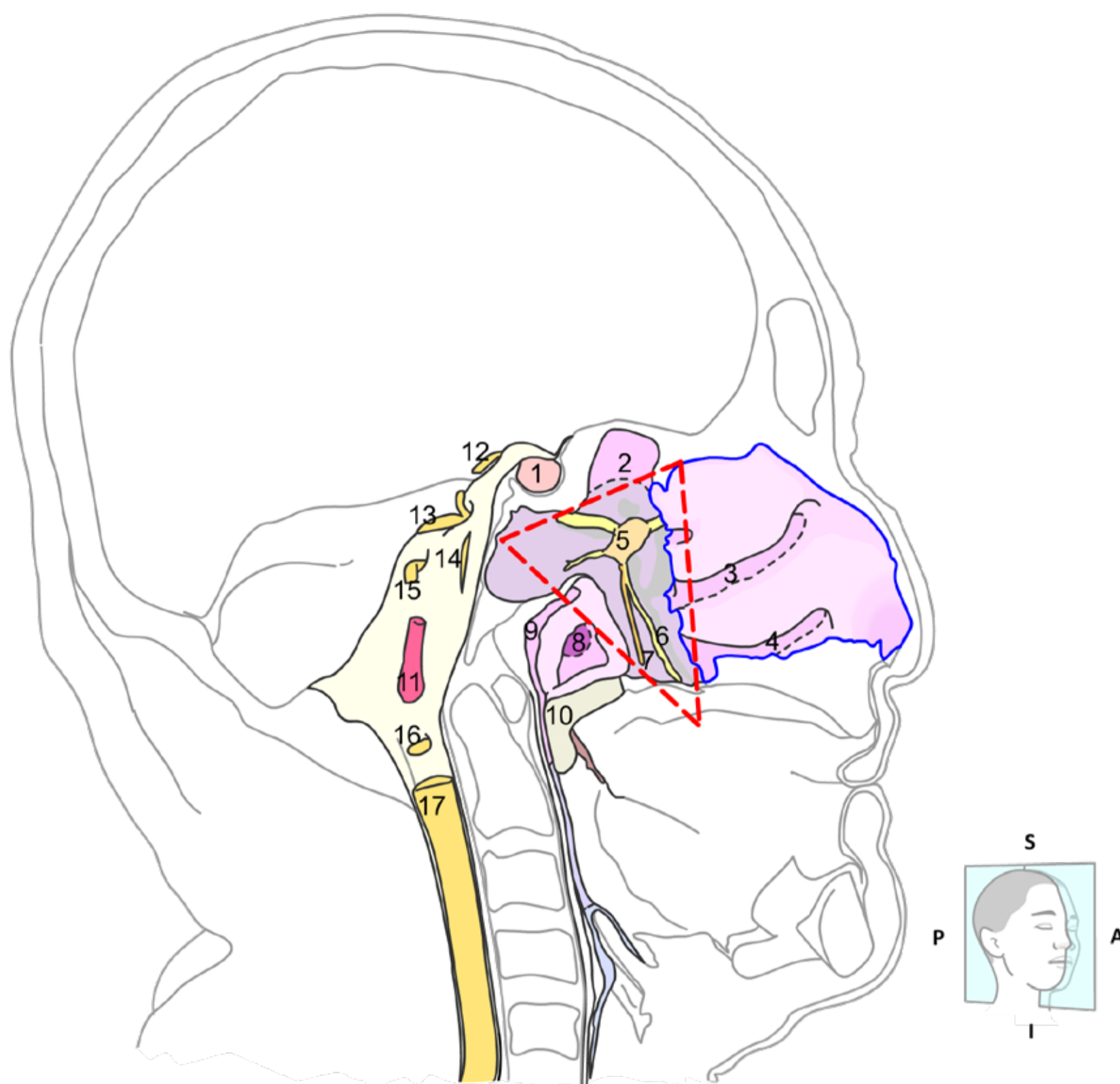


## PTERYGOPALATINE FOSSA



Sagittal section of the skull, showing cranial cavity and pterygopalatine fossa (outlined in red) & nasal cavity (outlined in blue)

- |                        |  |
|------------------------|--|
|                        | 1. Pituitary gland                                 |
|                        | 2. Sphenoid sinus                                  |
| Nasal cavity           | 3. Middle meatus                                   |
|                        | 4. Inferior meatus                                 |
| Pterygo-palatine fossa | 5. Pterygopalatine ganglion                        |
|                        | 6. Greater palatine nerve                          |
|                        | 7. Lesser palatine nerve                           |
|                        | 8. Pharyngotympanic tube opening (Eustachian tube) |
|                        | 9. Pharyngeal recess (Fossa Rosenmuller)           |
|                        | 10. Soft palate                                    |
|                        | 11. Vertebral artery                               |
| Cranial Nerves         | 12. CN II Optic nerve                              |
|                        | 13. CN III Oculomotor nerve                        |
|                        | 14. CN V Trigeminal nerve                          |
|                        | 15. CN VI Abducent nerve                           |
|                        | 16. Spinal accessory nerve                         |
|                        | 17. Spinal cord                                    |

1. The **Pharyngeal recess** is a deep recess behind the ostium of the **pharyngotympanic (Eustachian) tube** that connects the middle ear cavity (tympanum) with the nasopharynx. It aerates the middle ear system and clears mucus from the middle ear into the nasopharynx.

2. **Pterygopalatine ganglion** is the largest parasympathetic ganglion in the head & neck. It is suspended by nerve roots from the maxillary nerve. It contains the cell bodies of the parasympathetic ganglion cells supplying the lacrimal gland, mucous glands of the palates as well as that in the nasal cavity. The preganglionic parasympathetic fibers are derived from the seventh cranial nerve or facial nerve via its branch termed the greater petrosal nerve.

3. The **pterygopalatine ganglion** is sometimes called the “ganglion of hay-fever”.

**Clinical Correlation**—The pharyngeal recess (Fossa Rosenmuller) which lies posterior to the opening of the pharyngotympanic tube (Eustachian tube) is the common site of nasopharyngeal carcinoma (NPC).