

# Anatomical relationships of the pharynx

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Some of these are illustrated in Figure 52.5 . Parapharyngeal space This potential space lies lateral to the pharynx and is shaped like an inverted pyramid with its base at the base of the skull - and its apex at the level of hyoid. It is divided into a prestyloid space, which contains the deep lobe of the parotid gland, blood vessels, lymph nodes and fat tissue, and a poststyloid space (also known as carotid space), which contains cranial nerves IX-XII, the carotid artery , internal jugular vein, deep cervical lymph nodes and cervical sympathetic trunk. - Infection and necrosis of the cervical lymph nodes in the parapharyngeal space most commonly occur from infections of the tonsils or teeth (particularly the third lower molar tooth). - As the parapharyngeal space is not anatomically divided, infection may therefore spread from the skull base cranially to the superior mediastinum caudally and consequently often presents a surgical challenge. Retropharyngeal space This potential space lies posterior to the pharynx, bounded anteriorly by the constrictor muscles and the covering buccopharyngeal fascia and posteriorly by the prevertebral musculature and its overlying prevertebral fascia. It contains the retropharyngeal lymph nodes, which are usually paired lateral nodes but which are separated by a tough midline fibrous condensation that connects the prevertebral and buccopharyngeal fascia. As with the lymphoid tissue of Waldeyer's ring, these nodes are more active in infancy and young children, and it is at this age that they are most likely to be involved in inflammatory processes, which, if severe, may affect swallowing and respiration as a consequence of gross swelling and suppuration of the retropharyngeal space.

Tonsil Mandible Hyoid bone Thyroid cartilage Cricoid cartilage Figure 52.5 Sagittal diagram of the upper aerodigestive tract.

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