

MICROSURGICAL ANATOMY AND NEURORADIOLOGICAL CORRELATION OF THE PTERYGOPALATINE FOSSA

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The pterygopalatine fossa is a pyramidal space below the apex of the orbit. **OBJECTIVE:** In this study, we describe the microsurgical anatomy of the pterygopalatine fossa. We compare the structures with neuroradiological armamentarium. **METHODS:** Eight cadaver specimens were dissected. Was done a wide preauricular incision from the neck on the anterior border of the sternocleidomastoid muscle at the level of the cricoid cartilage to the superior temporal line was performed. The flap was displaced anteriorly and the structures of the neck were dissected follow by an zygomatic osteotomy and dissection of the ITF structures. After this the pterygopalatine fossa dissection was performed. All this anatomy was compared with neuroradiological studies. **RESULTS:** The maxillary nerve and its branches: meningeal nerve, zygomatic nerve, posterior superior alveolar nerve, infraorbital nerve and ganglionic branches. The pterygopalatine ganglion and its branches: orbital, nasopalatine, posterior superior nasal, anterior palatine, posterior palatine and pharyngeal. Some of these branches weren't homogeneously identified in all specimens. Maxillary artery and its branches and the branches posterior superior alveolar artery, infraorbital artery, artery of the pterygoid canal, pharyngeal artery, greater palatine artery and sphenopalatine artery. In the anterior approach, removal of the medial part of the posterior wall of the maxillary sinus expose the pterygopalatine fossa. **CONCLUSION:** It's not uncommon that tumors of the adjacent spaces spread into the pterygopalatine fossa. The microanatomical knowledge of the pterygopalatine fossa is paramount for skull base surgeons. The radiological knowledge is paramount to analysis preoperative anatomy.