MORPHOLOGICAL SPECIFIC FEATURES OF THE BUCCAL NERVE

Tcaci Anastasia[1], Yagudaev Ilana[2], Babuci Angela[3]
[1]Faculty of Medicine no.1, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova
[2]Faculty of Dentistry, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova
[3]Department of Anatomy and Clinical Anatomy, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. Variability of the buccal nerve is of high clinical importance in dental practice, maxillofacial, reconstructive and esthetic surgery. In some cases due to anatomical variation of this nerve, impairments of the neighboring nerves, specifically of the buccal branches of the facial nerve can occur.
The aim of our study was to identify the morphological peculiarities of the buccal nerve, its connections and their clinical significance.
Material and methods. The study was carried out at the Department of Anatomy and Clinical Anatomy of *Nicolae Testemitanu* State University of Medicine and Pharmacy. For our purpose, the anatomical dissection of 10 formalized hemiheads was done. The course, connections and peculiarities of the buccal nerve terminal ramifications were highlighted.
Results. In the majority of cases, the buccal nerve had a straight, or oblique descending course, branching into multiple twigs within the skin and mucosa of the cheeks. In 8 of 10 cases, the buccal nerve was connected with the buccal branches of the facial nerve. On a right female hemiface, the buccal nerve derived from the mandibular nerve with two roots, connecting to each other through an irregular loop. From the upper margin of that loop aroused two branches connecting the buccal nerve with the pterygopalatine ganglion and maxillary nerve. Distally to the loop, the buccal nerve had a tortuous zigzag course until the alveolar juga of the upper third molar, and then it continued its trajectory in an oblique and descending way, branching into multiple twigs within the cheek.
Conclusion. The tortuous buccal nerve is highly susceptible to iatrogenic injures and due to its connections with the buccal branches of the facial nerve, those iatrogenic injures can lead to facial nerve impairments. Specific features of the buccal nerve should be considered in dental practice when performing anesthesia, as well as in esthetic and reconstructive surgery of the facial region.
Keywords: buccal nerve, connections, specific features