SPECIFIC FEATURES OF THE FACIAL NERVE TRUNK

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Introduction: The facial nerve trunk (FNT) is vulnerable to iatrogenic injures in surgery of the retromandibular region, particularly in mastoidectomy. Variation of the FNT number, topography and course increase the risk of its iatrogenic injures. Our goal was to determine the length of the FNT depending on the gender, laterality, cephalometric type, branching pattern and variant of branching.

Materials and Methods: The study was conducted on 75 formalized adult hemiheads (59 males and 16 females), dissected at the Department of Anatomy and Clinical Anatomy of *Nicolae Testemitanu* State University of Medicine and Pharmacy. The length of the FNT was measured from the point of its exit through the stylomastoid foramen until point of its division into primary branches. One-way ANOVA, t-test and χ 2 test were used for statistical analysis.

Results: In males the mean length of the FNT was 11.3 mm and in females it was 10.4 mm, p = 0.289. Bilaterally the length of the FNT was equal to 11.1 mm, p = 0.981. The mean length of the FNT in mesocephalic type was 10.9 ± 2.87 mm, in brachycephalic type it was 12.3 ± 3.54 mm and in dolichocephalic type it was 10.9 ± 2.54 mm. The intergroup frequency variation (IGFV = 0.755); the degree of freedom (df = 2); p = 0.474. Seven branching patterns of the extracranial portion of the facial nerve were revealed in the current study. Depending on the branching pattern the length of the FNT varied as follows: Type I (12.2 ± 3.33 mm); Type II (11.0 ± 2.54 mm); Type III (11.3 ± 2.93 mm); Type IV (10.3 ± 3.85 mm); Type V (11.5 ± 2.08 mm); Type VI (10.1 ± 2.06 mm); Type NI-atypical (11.5 ± 3.11 mm); IGFV = 0.794; df = 6; p = 0.578. In classic branching patterns the mean length of the FNT was 11.4 mm, while in atypical variants, it was 10.6 mm; p = 0.258.

Conclusion: The length on the FNT was variable on four of the examined criteria. The FNT was longer in males, in brachycephalic type, in Type I and in classic variant of branching.

Keywords: facial nerve trunk, individual peculiarities, length, morphometry.