

average length and average diameter values of the parameters studied the bifurcation of the OCA, both right and left were located between the similar values of the two above groups. Length of the bifurcation of the right CCA average was equal to $18,5 \pm 5,2$ mm, and left to $19,8 \pm 5,3$ mm. The average value of the diameter of the bifurcation of the right CCA was $16,3 \pm 3,9$ mm and the left - $16,9 \pm 4,9$ mm. The angle of the branch on the right CCA was equal to $17,2 \pm 0,6$ °, left it was $19,6 \pm 1,1$ °. Side right angle with the NSA was equal to $176 \pm 1,7$ °, the left is the value was $170 \pm 1,5$ °. Side angle with the internal carotid artery was equal to $161 \pm 0,9$ ° right and $161 \pm 1,9$ ° to the left.

Conclusions: Our studies have revealed clear differences of morphometric characteristics of the bifurcation of the OCA in men with different forms of the neck.

Key words: common carotid artery, external carotid artery, internal carotid artery bifurcation of the common carotid artery, morphometry, the shape of the neck.

QUALITATIVE ANALYSIS OF NEURONS IN THE HUMAN PERIAQUEDUCTAL GRAY

Vujic Jovan

Academic adviser: Maric Dusica, M.D., Associate Professor, University of Novi Sad, Serbia

Introduction: The periaqueductal gray matter is classically divided into four major nuclei: dorsal, medial, lateral and ventral, according to their cytoarchitectural feature. While some studies indicate that these nuclei are composed of similar cell types, there is some evidence that each of these nuclei is arranged in discrete groups of cells on the basis of their neuronal morphology and their afferent and efferent connection.

Materials and Methods: The neurons were labelled by Golgi staining from five human midbrains, obtained from medico-legal forensic autopsies of adult human bodies and free of significant brain pathology. Two-dimensional digital images of each periaqueductal gray neuron were recorded by a digital camera connected to a light microscope.

Results: The neurons of the periaqueductal gray were qualitatively analysed, and these cells were classified into two main classes. Taking into account the shape of the cell body, numbers of the primary dendrites, shape of the dendritic tree and their position within the periaqueductal gray, three subclasses of the large neurons and two subclasses of the small neurons have been recognized.

Conclusion: The present study supports the hypothesis that the periaqueductal gray matter could be subdivided into discrete cell groups according to their neuronal morphology.

Key words: periaqueductal grey matter, neuron, human, anatomy, histology.

HORMONE REPLACEMENT THERAPY: THE GOOD, THE BAD AND THE UGLY

Neagu Oana, Tudorancea Ionut

Academic adviser: Iliescu Radu, M.D., Ph.D., University of Medicine and Pharmacy "Gr. T. Popa", Iasi, Romania

The incidence of hypertension and cardiovascular diseases is lower in women than age-matched men, before women go through menopause.