Abstract Book Of IXth International Interdisciplinary Scientific Conference Of Young Scientists And Medical Students

«Actual Problems Of Clinical And Theoretical Medicine»

Dobrovolskaya E.M., Maryenko N.I.

VARIANT ANATOMY OF THE LOBULES OF THE POSTERIOR LOBE OF THE HUMAN CEREBELLUM

Research advisor: Stepanenko A.Yu., Associate Professor
Kharkiv National Medical University
Department of Histology, Cytology and Embryology
Kharkiv, Ukraine

Actuality. The cerebellum is one of the most important functional structures of the central nervous system, which provides statics and coordination, it is also involved in cognitive processes, emotional state regulation. Morphological changes of cerebellar lobules are found in many congenital and acquired diseases of the cerebellum, at various mental disorders.

The aim. To investigate individual variability and features of variant anatomy of the posterior lobe of the cerebellum.

Material and methods. Research was conducted at the Kharkiv regional bureau of forensic medicine on 230 cerebellums of people of both sexes, who died of causes unrelated to brain pathology, 20-99 years old.

Results. The shape of lobules that form the posterior lobe of the cerebellum is quite varied. Differences of the structure of these lobules depend on the characteristics of the branching of the white matter, the number and location of the secondary branches. Variants of the structure of different lobules are similar to each other. Zero variant of the structure – main trunk is divided into two main branches, there is not secondary branches. The first variant – one secondary branch leaves from the upper main branch. The second variant – one secondary branch leaves from the lower main branch. Third – one secondary branch leaves from the place of division of the main trunk. Fourth – the first secondary branch leaves from the upper main branch, the second secondary branch leaves from the lower main branch. The fifth variant - upper main branch divides into three secondary branches. The sixth variant: secondary branches depart from the upper branch sequentially. The seventh: upper branch generates one branch, which is divided into proximal and distal branches. The eighth variant – lower main branch divides into three secondary branches. The ninth variant: secondary branches depart from the lower branch sequentially. The tenth variant: lower branch generates one branch, which is divided into proximal and distal branches. The eleventh variant – the first secondary branch leaves from the upper main branch, the second secondary branch leaves from the place of division of the main trunk. The twelfth variant–

the first secondary branch leaves from the lower main branch, the second secondary branch leaves from the place of division of the main trunk. The thirteenth variant – both secondary branches leave from the place of separation of main trunk or secondary branch divides into two daughter branches.

Conclusions. Thus, it was found that there is individual variability of the structure of the lobules of the posterior cerebellar lobe, namely white matter branching features. 14 variants of white matter branching of the lobules can be identified. These variants occur with varying frequency. Described variants of the shape of the cerebellar lobules can be used as criteria standards of modern diagnostic imaging techniques for the diagnosis of various diseases of the CNS.

Dutchak S.R., Priadka T.M.

MEDICINAL ANALGESIC AND ANTIPHLOGISTIC THERAPY WITH AN EXTRACT COMFREY

Research advisor: Melnyk M.V., Candidate of Medical Sciences, docent
Department of Medical and Biological Chemistry, IFNMU, Ivano-Frankivsk, Ukraine

Actuality. Comfrey known use for the treatment of joints and healing of wounds in a variety of dosage forms. The most important compound that causes the most basic pharmacological properties of drugs made from medicinal comfrey is allantoin.

The aim of the research. Prepare medicalpellicles with different ratios of pellicle-forming materials and introduced them comfrey in the alcohol solution and dry weight; studied the physicochemical properties of the pellicles of comfrey, their ability to swell and output of active substances.

Materials and methods: The need for pellicle-forming materials be accessible, safe and biodegradable search led to compositions based on natural water-soluble polymers, gelatin, polyvinyl alcohol and starch.

Results: Individuals have our combination of biocompatible polymers are effective and safe when used as a means of stitching together of lactic acid and zinc oxide, forming a complex capable of increasing the strength of the polymer pellicle. Were selected the best value components that yield a film that rapidly degrade (1-2 days) and long-acting (7-10 days).

Conclusions: The experiments showed that the synthesized pellicle can be prolonged drug and allows it to maintain a constant concentration of active