

CENTRAL NERVOUS SYSTEM CEREBRAL CORTEX MORPHOLOGY IN MENINGIAL SYNDROME

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Abstract

This scientific work in cases of meningeal syndrome central nervous system (CNS) brain of the bark morphological changes studied. Meningitis and to him/her suitable meningeal symptoms, including severe and soft brain in the curtains inflammation processes, neuron and glial dystrophic changes in tissues, microcirculation disorders like pathological cases from the point of view of morphology from the point of view analysis done In research histological and immunohistochemical methods through brain on the bark fabric changes to evaluate separately attention was directed. Received results meningeal syndrome pathomorphological mechanism understanding and his/her complications early in determining practical importance profession will.

Keywords: Meningial syndrome, central nervous system, meningitis, morphology, neuropathology, glial tissue, pathomorphology.

Introduction

Last in years central nerve system diseases between brain curtains inflammation conditions and to them characteristic meningeal syndrome to meet frequency increasing in my arms of the problem relevance and meningeal syndrome with passerby in diseases clinical the signs correct advice arrival and diagnostician table improvement through of patients life adjective is to improve .

human central nervous system (CNS). in the body the most complicated and vital important from systems one is considered His outside from the covers one was brain curtains (barks) – that is hard , soft and middle (mower) curtains brain from mechanical effects , infection and from inflammation protection in doing plays an important role . Thus together , this in the curtains dream giving pathological processes to the entire MNT activity serious impact shows [7 - 12].

Meningial syndrome is brain to the curtains impact doer inflammation and other than inflammation in the processes to the surface coming clinical signs is complex. Its clinical manifestation headache, vomiting , neck muscles tension , like photophobia symptoms with is characterized. Such conditions, especially meningitis, encephalitis and other often occurs in neuroinfections.

There is a meningeal syndrome was in patients brain of the bark morphological changes deep to study , this of changes character, spread level and their to the central nervous system was the effect determination practice for very important. This own in turn, to patients correct diagnosis to put, effectively treatment and preventive measures in marking help gives.

this work, in the context of meningeal syndrome brain on the bark morphological changes histological and pathomorphological in terms of analysis to do purpose done.

Research Methods

this work is the meningeal syndrome of the central nervous system brain bark morphology focused on learning . It uses clinical and laboratory methods.

The object is brain tissue taken from patients with meningitis.

For morphological analysis, the tissues obtained were fixed in formalin and embedded in paraffin blocks. Then, histological staining with hematoxylin-eosin was performed. These methods revealed signs of inflammation in the cerebral cortex, changes in neuronal and glial tissues, and pathological signs such as tissue dystrophy and necrosis.

Immunohistochemistry was also used to assess the depth of key cytokines and glial markers involved in inflammation (e.g. GFAP, CD68). This research method allowed us to study the molecular and cellular characteristics of pathological processes.

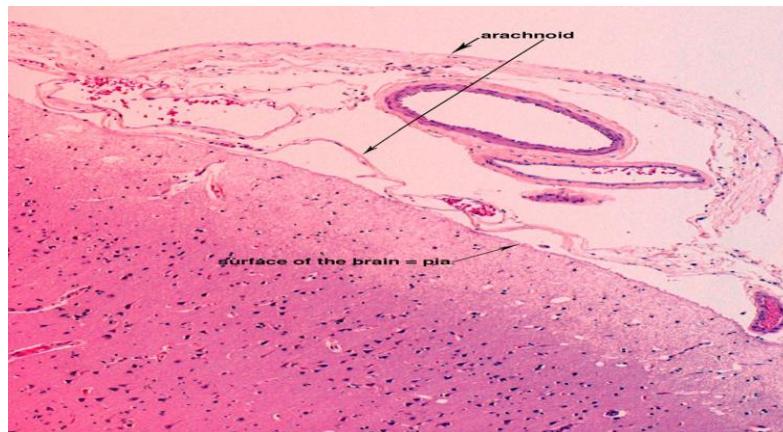


Fig. 1. Postlog of the brain dystrophy and necrosis in tissues

Additional, microscopy and photographs with the help of brain bark fabrics morphometry to do increased Received data to statistical analysis entered.

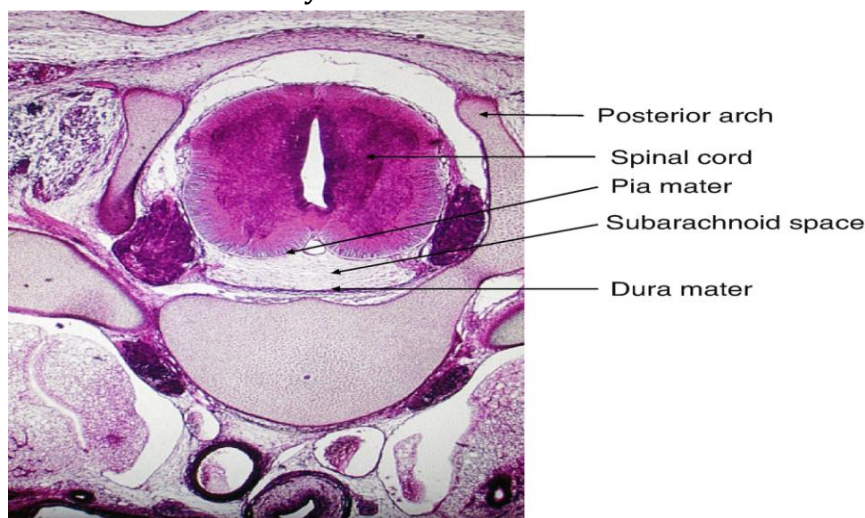


Fig. 2. Pathology in the hindbrain the passage .

Literature Analysis

Meningial syndrome and his/her to the central nervous system effect on the subject scientific literature analysis when you do this , in the field research mainly meningitis and other meningeal inflammation circumstances with related morphological and pathophysiological to changes that it is focused known it happened For example, modern neuropathology and pathomorphology according to in sources brain on the bark inflammation processes , swelling , neuron and glial such as dystrophy and necrosis in cells pathological signs wide covered [1,2].

Also foreign in research meningeal syndrome pathomorphological basics, inflammation cytokines , immunity and its role in the central nervous system brain on the bark morphological clinical significance of changes about information given in [3,4]. This research brain in the curtains inflammation processes molecular and cell at the level to study possibility gave .

Uzbek and in Russian in sources of the same problem medical diagnosis and treatment to the methods directed . Clinical and morphological research exists and their results this syndrome pathogenesis deeper to understand help gives [5,6]. At the same time, this in the field scientific literature continuous in a way updated going and new methods, in particular immunohistochemistry and of molecular biology methods in research wide being used is being observed.

With this together, in sources brain of the bark various in parts morphological with clinical symptoms of changes dependence, that is their pathogenetic to the point separately attention This is and meningeal syndrome effective treatment and prevention directions to improve service does .

Result and Discussion

The results of the study showed that in meningeal syndrome, multifaceted morphological changes occur in the cerebral cortex of the central nervous system. Histological analysis revealed large-cell infiltration, edema, and multi-layered lymphocytic accumulations around capillaries in the meninges, associated with the inflammatory process. At the same time, dystrophic changes in neurons and glial cells and, in some cases, micro-necrosis processes were observed in the pia mater.

Immunohistochemical analyses revealed a significant increase in the expression of cytokines and glial markers (GFAP and CD68) involved in inflammation, which confirms the mechanisms of inflammation at the cellular level. These data revealed the pathogenetic significance of inflammatory processes in the central nervous system in meningeal syndrome.

The obtained results show that the morphological changes in the cerebral cortex tissue in meningeal syndrome are important not only in understanding the processes of pathogenesis, but also in evaluating the clinical manifestations and complications of the disease. Such changes determination and understanding effective diagnostics and treatment measures work to go out possibility gives .

Discussion in the process , as well as our research results other scientists by taken information with suitable arrival known was . In works [3] and [1] taken results meningitis and meningeal in the syndrome brain on the bark inflammation and glial reactions presence was observed.

Conclusion as in other words, meningial in the syndrome central nervous system brain bark morphology changes clinical complications of the disease and pathogenesis in understanding important to the point owner in the future effective therapeutic approaches work exit for basis will be.

In conclusion, the literature review also shows the need for a comprehensive approach, that is, combining histological, immunohistochemical, and molecular methods, to study the morphology of the cerebral cortex of the central nervous system in meningeal syndrome.

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