MODERN PRINCIPLES OF DIAGNOSIS AND INTENSIVE THERAPY OF SPONTANEOUS INTRACEREBRAL HEMORRHAGE

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Relevance of the topic. Hemorrhagic stroke is the most devastating type of stroke, which is more likely to lead to mortality and severe disability. Mortality within the first 30 days of intracerebral hemorrhage (ICH) ranges from 30-55%, with half of the patients dying during the acute period, mainly within the first 48 hours. Without surgical treatment, up to 50% of patients die within three months after the first hemorrhage, and half of those who survive have neurological disorders with disability. The treatment strategy and intensive therapy should be aimed at minimizing the spread of bleeding and preventing or reducing secondary brain damage through intensive therapy, surgical treatment, and neuro monitoring.

Objective and research tasks: to study the basic principles of intensive therapy and diagnosis of spontaneous intracerebral hemorrhage to prevent secondary complications.

Research methods: the analysis is based on published foreign and Ukrainian articles. The search period covers from 2010 to 2023.

The treatment of patients with spontaneous intracerebral hemorrhage is aimed at early diagnosis and initiation of intensive therapy even at the pre-hospital stage. The patient's general condition and vital functions are assessed according to the ABCDE. The NIHSS International Stroke Severity Scale and the Hunt-Hess scale in patients with subarachnoid hemorrhage are used to determine the severity of the condition. Computed tomography of the brain is the "gold standard" of diagnostics. It allows for differential diagnosis and localization of the process and helps to resolve the issue of surgical treatment.

The main tasks of intensive care. The main attention is paid to the correction of blood pressure and the maintenance of the central perfusion pressure (CPP). Ventilation of patients with monitoring of CO2 and blood acid-base status. It is important to maintain EtCO2 at 35-45 mm Hg. In patients with, hemorrhage treatment should be aimed at eliminating vasospasm with calcium channel blockers (nimodipine
at a dose of 60 mg every 4 hours orally or through a nasogastric tube) and statins (simvastatin 80 mg or pravastatin 40 mg once daily). correction of the head pressure is performed by elevating the head end of the bed by 30°, avoiding excessive bending and tilting of the head; sedation of the patient for maximum adaptation to the ventilator, if necessary - muscle relaxation, as well as surgical treatment and correction of the head pressure and its monitoring. Intensive care should also be provided to combat cerebral edema. For this purpose, mannitol is used at a dose of 1 g/kg for 15-20 minutes, followed by administration every 6-8 hours at a dose of 0.25-0.5 g/kg. Moderate hyperventilation (target pCO2-30-34 mm Hg). Due to the fact that hypocapnia causes cerebral vasospasm and worsens perfusion, hyperventilation should be stopped as soon as possible and significant hypocapnia (below 30 mm Hg) should be avoided. If there is no effect, consider surgical intervention. Correction of hemostatic disorders. Maintaining normoglycemia and normothermia. Treatment of convulsive syndrome. Conducting neuromonitoring to prevent secondary complications (cerebral oximetry, intracranial pressure (ICP) monitoring).

**Conclusion.** Spontaneous cerebral hemorrhage causes high disability and mortality. In view of this, recent studies have directed the diagnosis of the condition to the early initiation of intensive care and early surgical treatment to prevent secondary neurological damage.

### References:
