PROSPECTS FOR THE USE OF ANTIOXIDANTS IN CHEMOTHERAPY FOR MALIGNANT BRAIN TUMORS

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Of all the existing methods of treatment of malignant tumors of the brain brain, the most widely used is currently taught combined method, including surgical treatment, chemotherapy and radiation therapy. Known oral, intravenous, intracarotid, local, intrathecal administration of chemotherapeutic drugs. but The main dose-limiting factor in the use of chemotherapy is systemic toxicity of the drugs used. According to the literature, one of the possible ways to reduce side effects effects is the use of antioxidants. Their use is justified by the fact that the mechanism of action of a number of chemotherapy drugs and radiation therapy is the formation of free radicals, which have a cytotoxic effect. In addition, there are known experimental works investigating antitumor the activity of the antioxidants themselves. We have studied the effect of using antioxidant dihydroquercetin in complex chemotherapy of 13 patients with malignant brain tumors. Of these, glioblastoma was was diagnosed in 6 patients, in 1 - carcinoma metastasis, in 5 - anaplastic astrocytoma, 1 patient had anaplastic ependymoastrocytoma. All patients with tumor recurrences. The treatment was combined intravenous and intra-arterial chemotherapy with nidran (100 mg/m2), etoposide (100 mg/m2), cisplatin (60 mg/m2). At the same time, in patients before and after treatment the state of the pro-antioxidant status of the body was studied. researched the content of diene conjugates, triene conjugates, Schiff bases, induced chemiluminescence.

The study showed that the clinical condition of patients with chemotherapy on the background of antioxidant therapy improved. noted reduction of nausea, vomiting, reduction of myelotoxicity. However, at the initial low rates of activity of free radical processes in the blood of patients a decrease in the relapse-free period was noted when using antioxidants. With normal and elevated indicators of process activity FLOOR use of antioxidants did not significantly affect the timing remissions.

Thus, the use of antioxidants in chemotherapy malignant brain tumors requires further investigation and possible only if oxidative homeostasis is controlled patients' bodies.