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PROGNOSIS OF EFFICACY OF POST-OPERATION TREATMENT OF METASTATIC BRAIN TUMORS

ABSTRACT. Background. Metastatic affection of brain by its prevalence, medical and social importance, economical burden represents a topical medical problem in neurosurgery and adjacent medical specialties. **Objective** – optimization of prognosis for post-operation metastatic brain tumors treatment efficacy. **Methods.** An active cohort randomized research with retro- and prospective, cross-sectional and longitude components has been conducted in 176 patients, including 96 males and 80 females aged 56 years with adenocarcinoma (152), melanoblastoma (21) and sarcoma (3), derived from lungs (39), breast (34), skin (25) kidneys (9), digestive tract (11), ovary and uterus (by 4 each), thymus (2), nasopharynx, pronasus (by 1 each). Standard basic diagnostic and treatment procedures have been performed. P-level critical value was 0.05. **Results.** Discriminant models of post-operation tactics choice, prognostic algorithm of unfavorable outcome evaluation after treatment have been developed. The approbation of the algorithm allowed to state its sensitivity (69.2 %), specificity (95.2 %), positive predicting value (75.0 %), negative predicting value (93.7 %). **Conclusion.** For the purpose of widening of arsenal of available decision-making means for further treatment tactics in metastatic brain tumors after conducted neurosurgical treatment the use of developed discriminant models is recommended. The risk of unfavorable outcome and efficacy of combined treatment prognosis for patients with metastatic brain tumors are recommended to assess using the developed prognostic algorithm.

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