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Practical guidance for direct oral anticoagulant use in the treatment of venous thromboembolism in primary and metastatic brain tumor patients

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Abstract

Management of venous thromboembolism (VTE) in patients with primary and metastatic brain tumors (BT) is challenging because of the risk of intracranial hemorrhage (ICH). There are no prospective clinical trials evaluating safety and efficacy of direct oral anticoagulants (DOACs), specifically in patients with BT, but they are widely used for VTE in this population. A group of neuro-oncology experts convened to provide practical clinical guidance for the off-label use of DOACs in treating VTE in patients with BT. We searched PubMed for the following terms: BTs, glioma, glioblastoma (GBM), brain metastasis, VTE, heparin, low-molecular-weight heparin (LWMH), DOACs, and ICH. Although prospective clinical trials are needed, the recommendations presented aim to assist clinicians in making informed decisions regarding DOACs for VTE in patients with BT.

Keywords: anticoagulants administration & dosage; anticoagulants adverse effects; brain metastasis; brain neoplasm; direct oral anticoagulants; intracranial hemorrhage; low-molecular-weight heparin; malignant glioma; venous thromboembolism.

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