Blood thinner safe for cancer patients with brain metastases

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Cancer patients with brain metastases who develop blood clots may safely receive blood thinners without increased risk of dangerous bleeding, according to a study, published online today in *Blood*, the Journal of the American Society of Hematology

Cancer increases a patient's risk of developing blood clots. When a patient with cancer develops a clot, treatment with a blood thinning medication called an anticoagulant is often added to their treatment regimen in order to prevent the potentially fatal complication of blood clots traveling to the lungs. However, if cancer spreads to the brain, anticoagulant treatment may be withheld because it could cause dangerous bleeding in the patient's head, which is already a risk for these patients. The task of preventing dangerous blood clots and avoiding life-threatening bleeding presents a particular challenge for specialists in patients with tumor metastases in the brain. Until recently, no data had confirmed whether blood thinners could be safely administered in these patients.

In order to determine whether administering blood-thinning medication to patients with brain metastases and blood clots increases bleeding, researchers studied the medical records of 293 patients, 104 of whom had received a widely used blood thinner (enoxaparin). The remaining 189 patients did not receive blood-thinning treatment. Researchers matched the patients in each group by year of brain metastases diagnosis, tumor type, age, and gender.

Based on their reviews of patients' medical records, researchers determined that there was no significant difference in the risk of bleeding between the patients who received enoxaparin and those who did not after 12 months. Cumulative incidence of bleeding in the head was 44 percent in the enoxaparin group versus 37 percent in the group that did not receive treatment. Regardless of treatment with enoxaparin, investigators observed a high bleeding rate among all patients with brain metastases (between 20-50%), consistent with the notion that bleeding is more common than originally thought.

"While it is a very common clinical scenario to treat a patient with a metastatic brain tumor who also develops a blood clot, before this study there was very little data to inform the difficult decision of whether or not to anticoagulate these patients," said senior study author Jeffrey Zwicker, MD, of Beth Israel Deaconess Medical Center and Harvard Medical School. "Our findings, which demonstrate that current practice is safe, should reassure physicians that anticoagulants can be safely administered to patients with brain metastases and a history of blood clots."

Provided by American Society of Hematology