

Lateral sinus thrombosis

[Lateral sinus thrombosis](#) (LST) usually occurs as a complication of middle ear infection. The involvement of lateral sinus during the course of ear infection was a well-known complication in pre-antibiotic days.

Patients in whom a syndrome of increased ICP secondary to certain medications develops or who are found to have cerebral [lateral sinus thrombosis](#) are nonetheless still classified as having [idiopathic intracranial hypertension](#) (IIH).

IIH is the preferred term for this condition, replacing pseudotumor cerebri, which often includes cerebral [venous sinus thrombosis](#) and other etiologies of increased ICP, and benign intracranial hypertension, which does not take into account that some IIH patients do not have a “benign” course and go on to irreversibly lose vision ¹⁾.

Incidental radiological [lateral sinus](#) thrombosis following [posterior fossa surgery](#) has an incidence of 6.7%. To further define the benefit-to-risk ratio of a treatment-dose anticoagulant therapy, a prospective trial should be considered ²⁾.

Treatment

There are no [guidelines](#) for the [management](#) of postoperative [lateral sinus](#) thrombosis following [posterior fossa surgery](#). Introducing treatment-dose [anticoagulant therapy](#) during the immediate postoperative period increases the risk of [intracranial hemorrhage](#).

A study assessed the incidence of and risk factors associated with postoperative lateral sinus thrombosis and the complications related to [thrombosis](#) and/or [anticoagulation](#).

This study was a retrospective monocentric analysis of adult patients who underwent surgical removal of a posterior fossa space-occupying lesion with available postoperative imaging. Postoperative lateral sinus thrombosis was defined as a T2* [Hypointensity](#) within the venous sinus and/or a filling defect on postcontrast MRI or CT scan.

Among 180 patients, 12 (6.7%; 95% CI 3.0-10.4) were found to have lateral sinus thrombosis on postoperative imaging, none of whom were symptomatic. Unadjusted risk factors for postoperative lateral sinus thrombosis were a history of deep venous thrombosis ($p = 0.016$), oral contraceptive pill ($p = 0.004$), midline surgical approach ($p = 0.035$), and surgical exposure of the sinus ($p < 0.001$). Seven of the patients (58.3%) with a postoperative lateral sinus thrombosis received immediate treatment-dose anticoagulant therapy. Lateral sinus recanalization occurred radiologically at a mean time of 272 ± 23 days in 85.7% of patients (6 of 7) undergoing treatment-dose anticoagulant therapy and in 20% of patients (1 of 5) not receiving treatment-dose anticoagulant therapy. Postoperative complications occurred in 56.2% of patients (9 of 16) who received treatment-dose curative anticoagulant therapy and in 27% of patients (45 of 164) who did not.

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6.7%. To further define the benefit-to-risk ratio of a treatment-dose anticoagulant therapy, a prospective trial should be considered ³⁾.

Lateral sinus thrombosis is a potentially devastating but seldom studied complication of [cerebellopontine angle tumor](#) surgery. Systemic anticoagulation in the early postoperative period has often been avoided due to the potential risks of [intracranial hemorrhage](#).

The goal of a retrospective review in a tertiary referral center, was to identify the frequency, treatment, and outcomes in patients who develop postoperative [venous sinus thrombosis](#) following CPA tumor surgery and receive early systemic anticoagulation.

Of 43 patients with CPA tumors, Moore et al., report five patients (11.6%) with transverse and/or sigmoid sinus thrombosis following resection of the tumor, four of which were detected on routine early postoperative noncontrast computed tomography (CT) scan. The thrombosis was confirmed in all cases with CT venography or magnetic resonance venography. Affected patients had significantly larger tumors than controls and tended to undergo longer operations. These patients were treated with immediate anticoagulation (intravenous heparin, followed by Coumadin for 6 months) without complication. Conclusion Venous sinus thrombosis is an underrecognized complication of CPA surgery, but it can be diagnosed in the early postoperative period by noncontrast CT imaging. Early postoperative initiation of systemic anticoagulation appears safe and effective to prevent the progression of thrombosis and its consequences ⁴⁾.

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Last update: **2024/06/07 03:00**

