

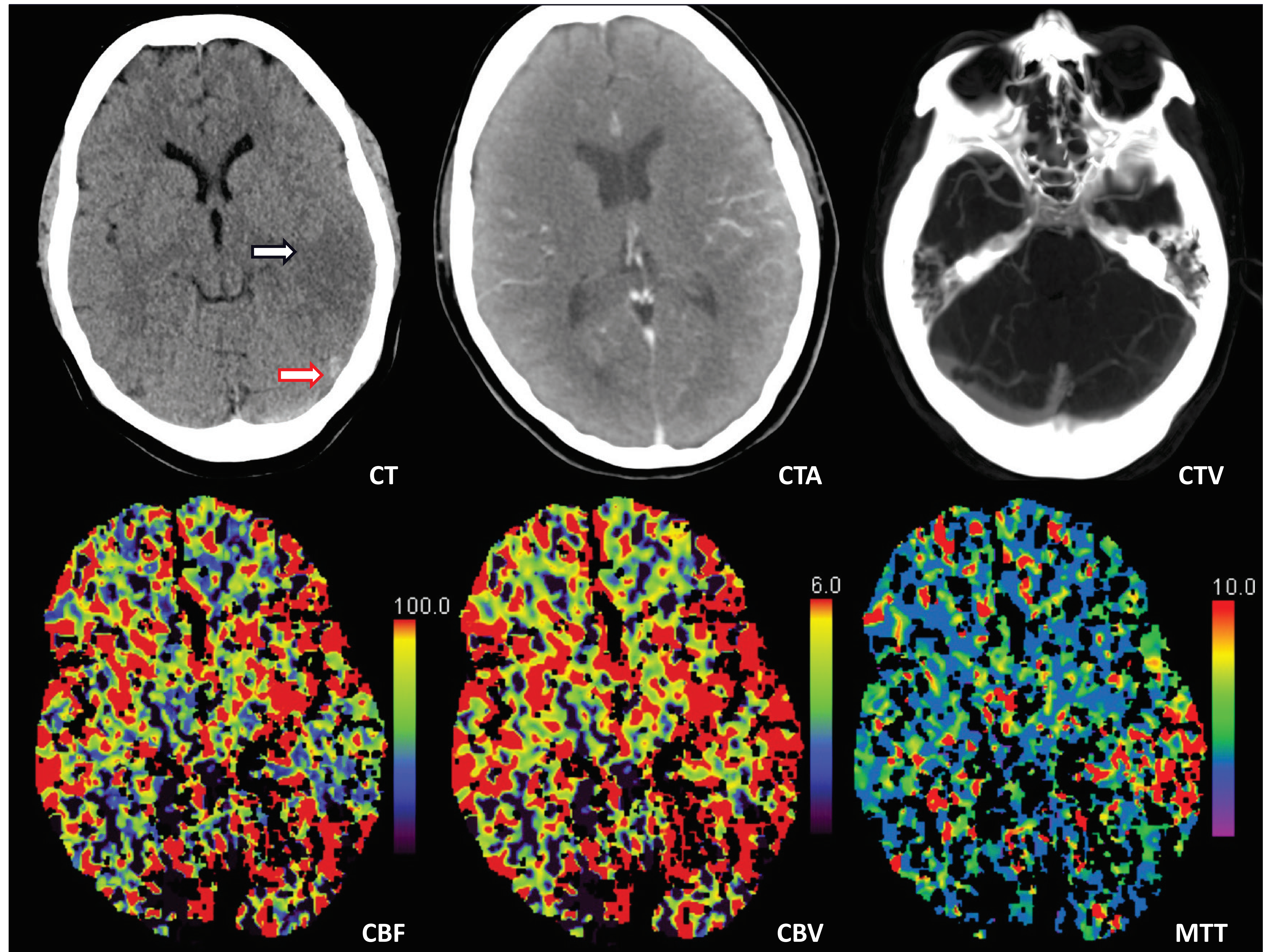
BACKGROUND

Cerebral venous thrombosis (CVT) is a rare cause of acute stroke with usually a subacute to chronic presentation. Here, we discuss initial imaging findings of a misdiagnosed case of CVT that was thought to be an acute arterial ischemic stroke (AIS) and treated with thrombolysis.

METHODS / CASE SUMMARY

A 42-year-old woman presented within three hours of acute onset global aphasia and right homonymous hemianopia. Initial CT showed loss of grey-white differentiation in left posterior temporal lobe. CT angiography (CTA) did not show any large vessel occlusion, although an increased area of vascularity was observed around the same area. CT perfusion (CTP) showed mild reduction in cerebral blood flow (CBF), increased cerebral blood volume (CBV), and increased mean transit time (MTT) suggesting ischemic penumbra without core infarct.

She was diagnosed with AIS and received thrombolysis which resulted in hemorrhagic conversion (PH type II). Later, an MRI and CT venogram demonstrated an occlusive thrombus in left transverse and sigmoid sinuses. Upon reviewing the initial neuroimaging, an area of subtle hyperdensity was identified along the vein of Labbe which likely represented the presence of thrombus. The area of increased vascularity on CTA and CTP findings were likely secondary to increased venous congestion.



RESULTS / PATIENT OUTCOME

She was started on anticoagulation. At 90-day follow-up, she had full comprehension and improved expressive aphasia.



CONCLUSION

The case highlights the importance of recognizing CVT as a rare cause of stroke. Knowledge of initial radiographical findings can help in making a prompt diagnosis. The role of thrombolysis in such cases remains to be explored in larger studies.