

# Acute venous thrombosis of inferior cerebellar vein, case report.

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## INTRODUCTION

Isolated thromboses of cortical veins are rare and cerebellar vein thromboses are considered exceptional in scientific literature. Cerebral sinus venous thrombosis (CSTV) is characterized by variety of clinical presentation and etiology and represents an important cause of cerebral vascular accidents. Isolated thromboses of cortical veins are rare and cerebellar vein thromboses are considered exceptional.

We report the case of a 51-year-old Caucasian woman who was in-hospitalized due to sudden onset of frontal stabbing headache followed by confusion and dizziness.

Her medical history was positive for migraine with visual aura, polycystic ovarian syndrome. Her neurological examination resulted normal except for gait difficulty due to dizziness.

## MATERIALS AND METHODS

She performed brain computer tomography without contrast which showed cerebellar hyperdensity and magnetic resonance angiography examination which showed hyperintensity at the cortico-subcortical junction in the left upper semi-lunar lobule, suspect for bleeding (figures 1-3). She performed cerebral angiography (figures 4-5), which confirmed the presence of acute venous thrombosis of inferior cerebellar vein, associated with left lateral sinus hypoplasia, with left superior semilunar lobule involvement. Low molecular weight heparin (subcutaneous Enoxaparin 4000 bid) was initially introduced, then was switched to oral anticoagulant therapy (Warfarin). Thrombophilia and immunological blood tests were normal except for subclinical hypothyroidism with mild increased value of thyroid stimulating hormone and mild positivity of thyroid antithyroglobulin antibody and thyroid peroxidase antibodies, for which therapy with levothyroxine 25 mcg /die was introduced. Both headache and dizziness improved and neurological examination was normal at discharge.

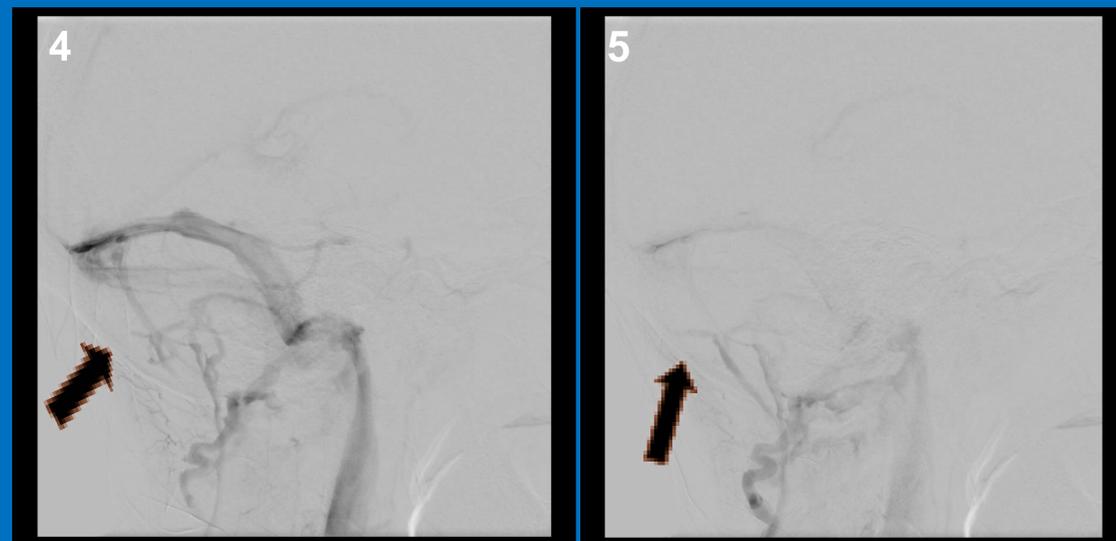


Figure 1.2: brain CT without contrast FLAIR Figure 3: Brain MRI coronal section T2

## DISCUSSION AND REMARKS

We report the case of a patient diagnosed for acute cerebellar venous thrombosis, without involvement of other venous sinuses and prothrombotic risk factors in medical history. A possible etiological role of subclinical hypothyroidism can be taken into consideration even if possible association atherothrombotic with stroke is uncertain.

In literature some cases of isolated cerebellar venous thrombosis have been reported, such as a patient with isolated thrombosis affecting the inferior cerebellar vein mimicking vermian tumor, or another with bilateral cerebellar hemorrhage and altered signal of the superior vermian vein suggestive for thrombosis with negative workup for hematologic, coagulation, and immunologic disorders.



Figures 4-5: brain angiography

## CONCLUSION

Isolated acute venous thrombosis of inferior cerebellar vein with left superior semilunar lobule involvement has been never described in literature and should be taken in consideration when evaluating patients with sudden atypical headache and cerebellar symptoms in department of emergency.

## BIBLIOGRAPHY

- 1) Vilela MD, Pedrosa HA, Filho MAD. Cerebellar cortical vein thrombosis mimicking a vermian tumor: case report *Neuroradiol J.* 2018 Jun;31(3):309-312. doi: 10.1177/1971400917725760. Epub 2017 Aug 8.