

# Transient coma as Percheron's artery stroke: a case report



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## INTRODUCTION

The artery of Percheron (AOP) is a rare anatomic variation in the brain vascularization in which a single arterial trunk arises from the posterior cerebral artery (PCA) to supply both sides of brain structures, i.e. the thalamus and midbrain.

Occlusion of this uncommon vessel results in a characteristic pattern of bilateral paramedian thalamic infarcts with or without mesencephalic infarctions

## CASE REPORT

We report the case of a 76 years-old Caucasian woman who was admitted to Emergency Room in coma (Glasgow Coma Scale- GCS=7). Her husband found her lying on the floor, unresponsive. Two hours before she was in healthy conditions.

Her past history was unremarkable, except for arterial hypertension and a previous surgical intervention for left popliteal aneurism. She has never had attacks of dizziness or loss of consciousness; she had never suffered from epilepsy.

Neurological examination showed bilateral Babinski sign and bilateral myotic pupils with mild anisocoria (left>right), no gaze deviation and snoring with pauses of 2-3 seconds.

Brain CT, blood exams, ECG were all normal. Flumazenil was administered without benefit.

After an hour her state of consciousness improved and the patient became alert and cooperative. Her neurological examination became unremarkable except for mild bilateral limitation in upward gaze.

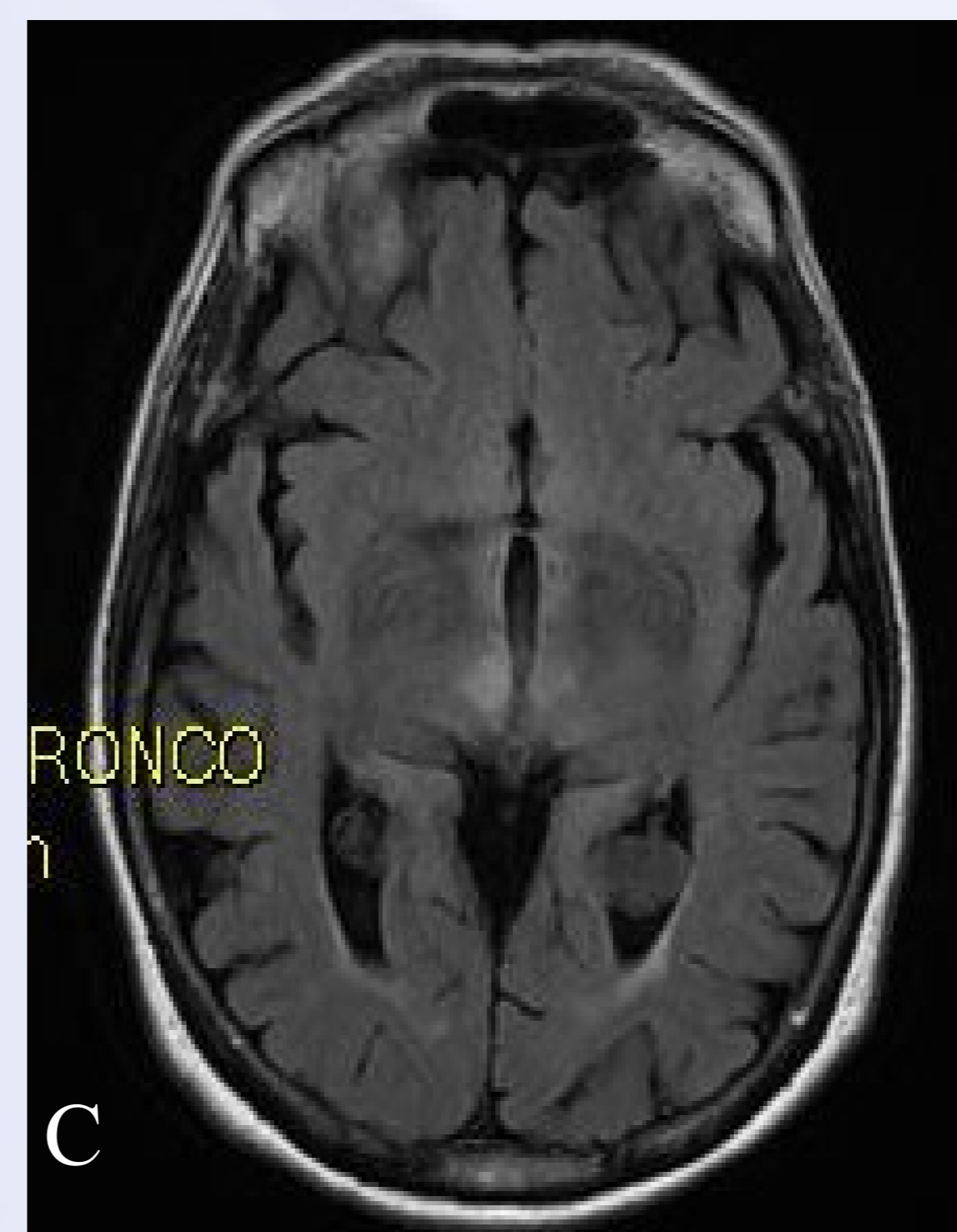
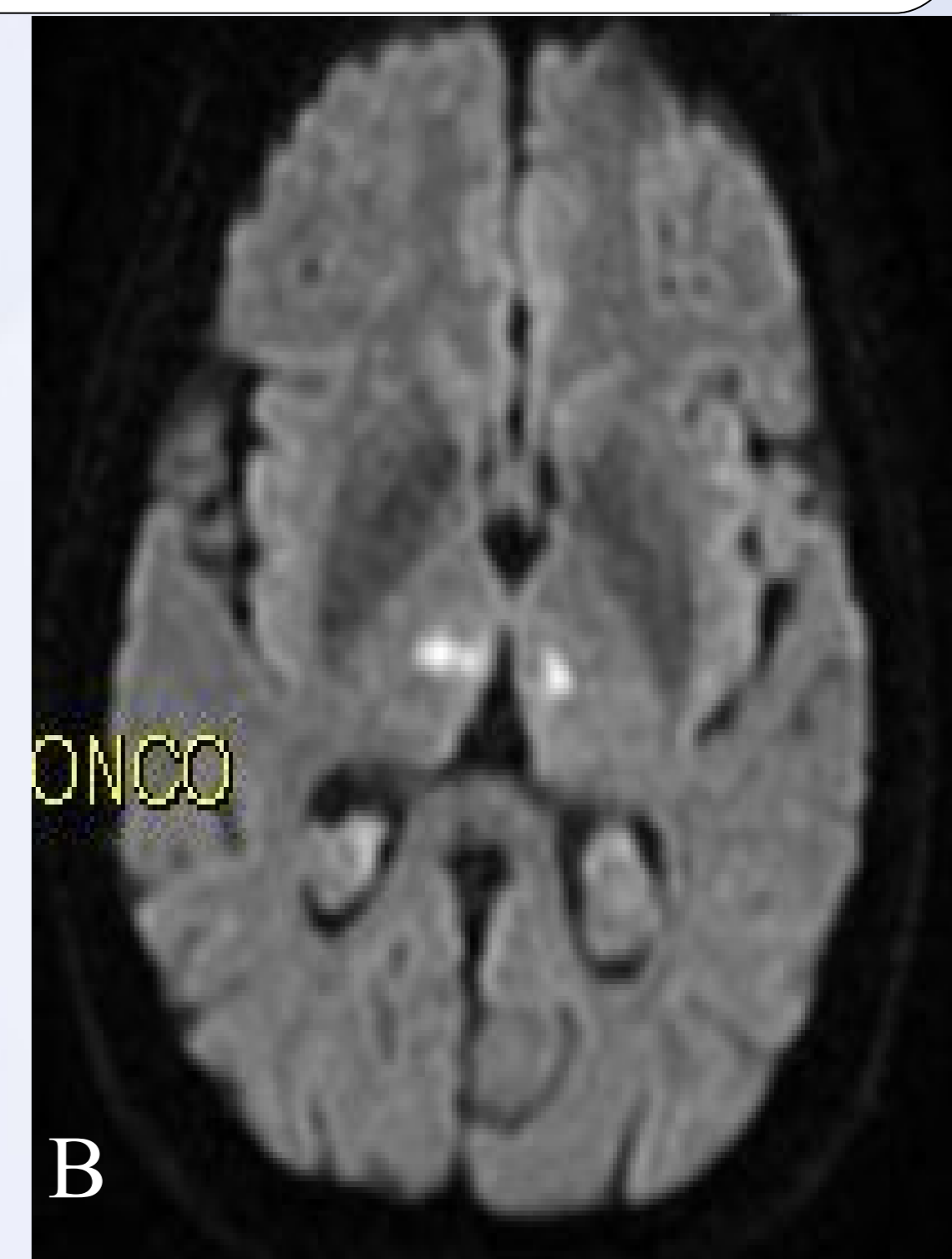
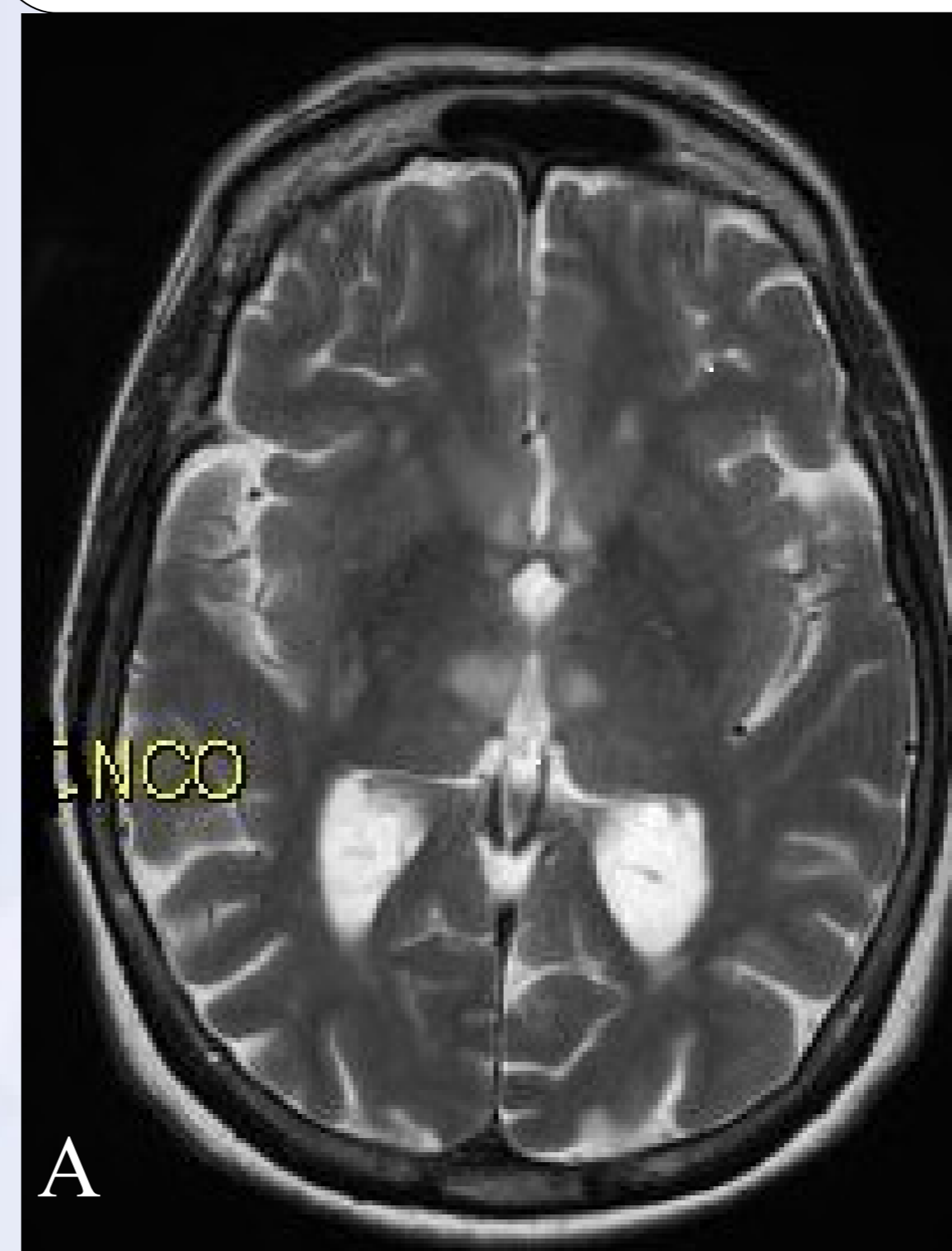
## REFERENCES

- Rodriguez EG, Lee JA .J Radiol Case Rep. 2013 Jul 7: 7-14
- Arauz A, et al. J Stroke Cerebrovasc Dis. 2014 May-Jun 5: 1083-8
- Liu WL et al. Intern Med. 2013, 17: 2007-8
- Lamout U. et al Radiol Oncol. 2015 Mar 25; 2:141-6

## EXAMS

Brain MRI showed bilateral thalamic subacute stroke; occlusion of basilar apex was excluded. Stroke of Percheron's artery territory was diagnosed.

At discharge, neurological examination and cognitive assessment were unremarkable.



- A) T2 FRFSE sequence: bilateral thalamic stroke
- B) DWI sequence: bilateral thalamic stroke
- C) T2 FLAIR: bilateral thalamic stroke
- D) Angio- MRI: normal basilar apex

## CONCLUSIONS:

Bilateral thalamic infarcts, even if rare, account for 22 to 35% of all thalamic infarcts. In Emergency Room, Percheron's artery occlusion should be considered in patients with patients with unexplained coma.