Case (035) A sudden onset of fluctuations level of consciousness due

to percheron artery occlusion.

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## **CASE PRESENTATION**

A 47-year-old woman arrived at the emergency department after orotracheal intubation due to an altered level of consciousness. At the initial brain CT, we objected small bilateral thalamic hypodensities (image A).

During admission, she presented episodes of a fluctuating level of consciousness accompanied by vertical ophthalmoplegia and dysarthria.

The brain MRI requested showed hyperintense bilateral thalamic lesions in T2 FLAIR and diffusion with restricted diffusion in the ADC map (images B, C, and D). Findings were compatible with Percheron artery stroke.

## DISCUSSION

Percheron artery stroke is a rare pathology with unknown prevalence. This artery begins at a common trunk originating from one of the two posterior brain arteries and irrigates the thalamus and rostral portion of the mesencephalon. The most frequent cause associated with this stroke type is cardioembolic.

The symptoms associated with this pathology are non-specific and may vary from disorientation to coma with a fluctuating level of consciousness.

The typical clinical triad includes vertical gaze paralysis, memory alteration and coma. In imaging and depending on the length of clinical evolution, bi-thalamic hypodensities can be observed with or without mesencephalon affectation; which are hyperintense in T2 FLAIR with restricted diffusion in the ADC map.

## CONCLUSION

Percheron stroke is a real clinical challenge, so its diagnosis is made mainly by MR. It should include in the differential diagnosis of patients with low-level of consciousness and normal brain CT.

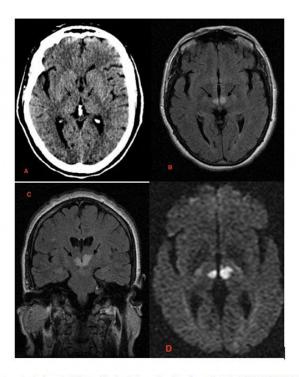


Image A: Axial CT without contrast showing bilateral thalamic hypodensities (arrow); B: Axial MRI T2 FLAIR with bilateral thalamic hyperintensities (arrows). C: Coronal MRI T2 FLAIR coronal. D: Axial diffusion MRI T2 FLAIR.

## **BIBLIOGRAPHY**

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