

# To scan or not to scan: a case of Migrainous Infarction in elderly

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## Introduzione

To demonstrate the role of MRI to detect Migrainous infarction (MI). MI is a rare form of ischemic stroke occurring during a typical migraine attack with aura (MA) with permanent symptoms and an appropriate lesion for neuroimaging (1). The incidence of MI is lower than 1% of all ischemic strokes (2), but it may represent up to 20% of all ischemic strokes in younger patients (3). The diagnosis of MI is very difficult in older subjects in whom ischemic stroke is commonly related to typical cardiovascular risk factors. We present a rare case of migraine infarction in an elderly patient.

## Metodi

A 67-year-old non-smoker woman suffered from migraine headaches, frequently with a visual aura, since she was 15. The visual aura was characterized by scintillating scotomas, blurred vision, and partial right hemianopia. She had 1-2 attacks per month. Since menopause, at the age of 50, she had no more migraine attacks. She had no vascular risk factors or neuropsychiatric disorders. She went to the emergency room of our hospital for pulsating frontal headache accompanied by nausea with photo- and phonophobia and a persistent visual aura, occurred an hour after she woke up in the morning.

## Risultati

Neurological examination showed right hemianopia. Brain MRI showed an acute ischemic lesion in the right occipital lobe. The patient underwent thorough etiological investigation: blood tests and cerebrospinal fluid analysis were normal; an ECG, transthoracic and transoesophageal echocardiography, Holter ECG, extracranial ultrasound and electroencephalogram were normal. We prescribed aspirin 100 mg/die for secondary stroke prevention. The headache resolved about 48 hours after admission, while the visual field defect partially improved in the following days.

## Conclusioni

Although MI is prevalent among young people, it should be considered as a cause of stroke even in the elderly. According to the AAN guidelines, the routine use of neuroimaging is not justified in a patient presenting MA attacks matching the ICHD-3 diagnostic criteria (1). However, symptoms similar to a well-known previous aura attack may actually be due to an ischemic stroke. This case highlights how there could be exceptions to the diagnostic workup indicated in the guidelines. A previous MA diagnosis might delay access to the hospital because the patient and the physician could presume that the neurological symptoms are transitory as in the previous attacks. These factors might delay the diagnosis of stroke and reduce the chances of successful treatment with reperfusion therapy.

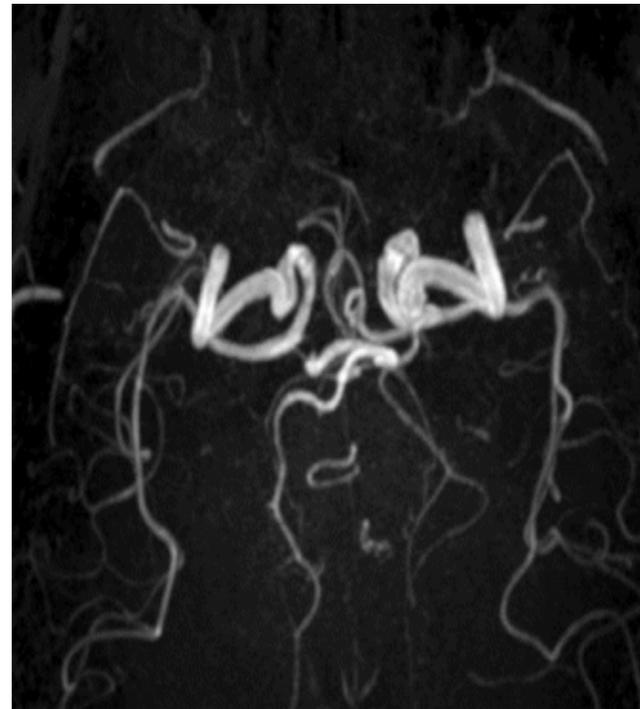


Fig. 1A. MRI Diffusion Weighted Imaging (DWI) showing an acute right occipital infarction.

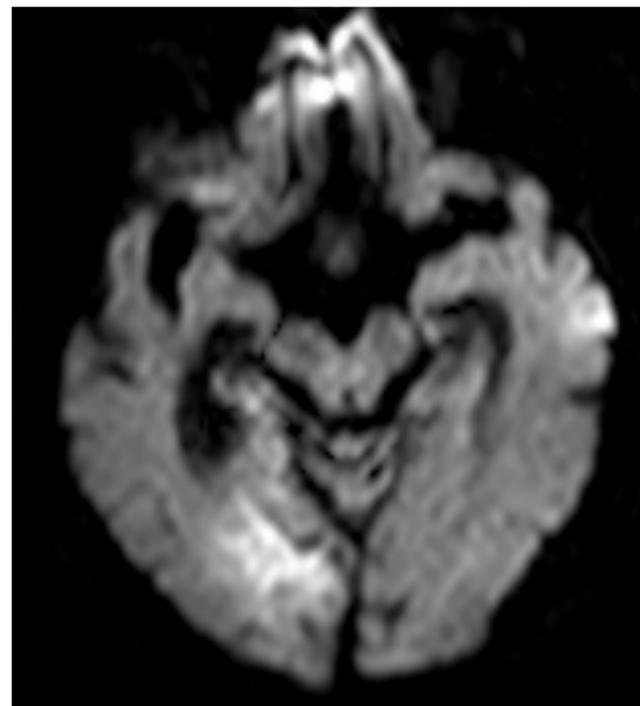


Fig. 1B. MRI arterial angiography showing no-alteration of main cerebral vessels.

## Bibliografia

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