Article

PAMJ Clinical Medicine

Images in clinical medicine

Sphenoid ridge meningioma presenting as ischemia stroke

Hatim Belfquih, Ali Akhaddar

Corresponding author: Hatim Belfquih, Department of Neurosurgery, Avicenne Military Hospital, 40000, Marrakech, Morocco. hatimbelfquih@gmail.com

Received: 23 Aug 2020 - **Accepted:** 18 Jan 2021 - **Published:** 22 Jan 2021

Keywords: Sphenoid ridge meningioma, middle cerebral artery, acute cerebral infarction

Cite this article: Hatim Belfquih et al. Sphenoid ridge meningioma presenting as ischemia stroke. PAMJ Clinical Medicine. 2021;5(31). 10.11604/pamj-cm.2021.5.31.25721

Available online at: https://www.clinical-medicine.panafrican-med-journal.com//content/article/5/31/full

Sphenoid ridge meningioma presenting as ischemia stroke

Hatim Belfquih[1,2,&], Ali Akhaddar[1,2]

[1]Department of Neurosurgery, Avicenne Military Hospital, Marrakech, 40000, Morocco, [2]Cady Ayyad University, Marrakech, Morroco and Mohammed V University in Rabat, Rabat, Morocco

[&]Corresponding author

Hatim Belfquih, Department of Neurosurgery, Avicenne Military Hospital, 40000, Marrakech, Morocco

Image in medicine

A previously healthy 49-year-old woman presented to the emergency room with acute onset of left hemiparesis and dysarthria. Neurological examination showed a left central-type facial palsy. The muscle power grade 3 in the upper limbs and grade 4 in the lower limbs. Complete blood count, chest radiograph, ECG, echocardiogram and a duplex Doppler ultrasound scan of the carotid artery on the symptomatic left side were also normal. Magnetic resonance imaging (MRI) with angiography (MRA) (A,B,C,D,E,F) confirmed the right sphenoid wing mass that had displaced and distorted the right middle cerebral artery (MCA) postero-superiorly, thereby resulting in an acute thromboembolic

MCA territory infarct. The patient underwent Simpson grade III resection through the pterional approach. The vessel compression was resolved, but the hemiparesis persisted. The pathology revealed a meningothelial meningioma. She was maintained on oral aspirin at 160 mg/ day, after a 6-month rehabilitation programme, the patient recovered with mild paresis in the left upper extremity. Meningiomas may present with slowly progressive signs of neurological deficit, headache or focal seizures. Exceptionally, they may compress surrounding major cerebral blood vessels and compromise cerebral blood flow resulting in acute neurological symptoms attributable to vascular insufficiency of a specific cerebral blood vessel thereby simulating classical ischemia stroke.

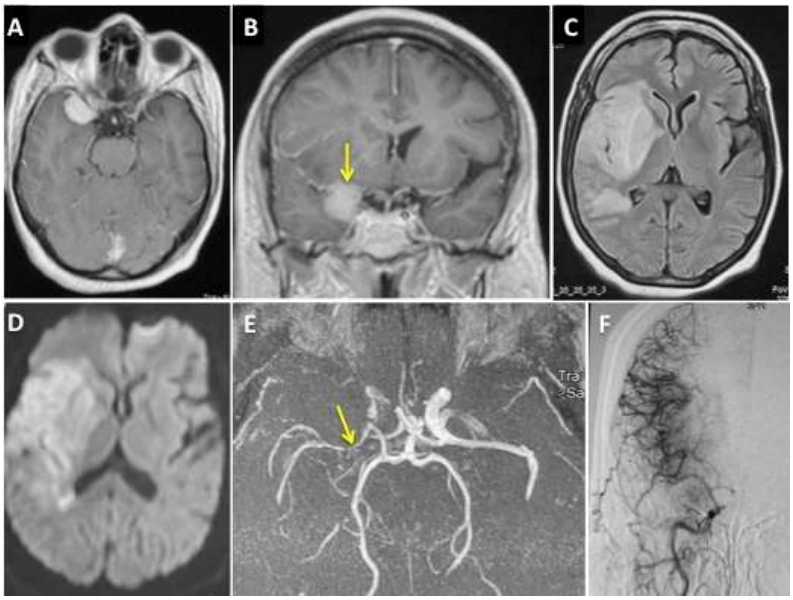

Figure 1: A,B) coronal and axial T1 weighted magnetic resonance images with gadolinium enhancement showing a right sphenoid wing meningioma compressed the first segment of the middle cerebral artery (MCA) (arrow); C,D) axial fluid attenuated inversion recovery images and diffusion-weighted magnetic resonance imaging confirmed acute cerebral infarction in the right MCA territory; E) magnetic resonance angiogram showing stenosis of the M1 segment of the MCA (arrow); F) cerebral angiograph with right internal carotid artery injection demonstrating stenosis of the right proximal M1 portion and radiographic blush from the surrounding meningioma with significant collateral flow to the right MCA territory