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Spontaneous Convexity Subarachnoid Hemorrhage Caused by Internal Carotid Occlusion: Radiological Features

Hemorragia subaracnóidea espontânea na convexidade causada por oclusão da carótida interna: Características radiológicas

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Abstract

A 79-year-old patient was admitted to the emergency room with transitory monoparesis in the left hand and dysphasia. The brain computed tomography (CT) and magnetic resonance imaging (MRI) showed a spontaneous right convexity subarachnoid hemorrhage (cSAH). Digital subtraction angiography (DSA) confirmed an asymptomatic occlusion of the right internal carotid artery (ICA) . Cases related to stenosis have already been described, but there is no similar report of a case related to occlusion, even though the pathophysiology of both entities is similar. Atraumatic SAH has been associated with intracranial and extracranial artery stenosis.

Keywords
- spinal hemorrhage
- carotid stenosis
- skull tomography

Resumo

Paciente de 79 anos foi admitida na sala de emergência, com monoparesia braquial transitória à esquerda e disfasia. O exame de tomografia cerebral (TC) e ressonância magnética mostraram uma hemorragia subaracnóidea na convexidade no hemisfério direito (cSAH). A angiografia por subtração digital confirmou uma oclusão da artéria carótida interna (ACI) direita assintomática. Casos como esses relacionados à estenose já foram descritos, porém, relacionados à oclusão, não há relato semelhante, embora a fisiopatologia de ambas as entidades seja semelhante. cSAH tem sido associada à estenose de artérias intracraniana e/ou extracraniana.[1]

Palavras-chave
- hemorragia subaracnódea
- estenose de carótida
- tomografia de crânio

Case Report

A 79-year-old patient was admitted to the emergency room with transitory monoparesis in the left hand and dysphasia. The brain computed tomography (CT) (►**Fig. 1A-C**) and magnetic resonance imaging (MRI) (►**Fig. 1D-F**) showed a spontaneous right convexity subarachnoid hemorrhage (cSAH). Digital subtraction angiography (DSA)

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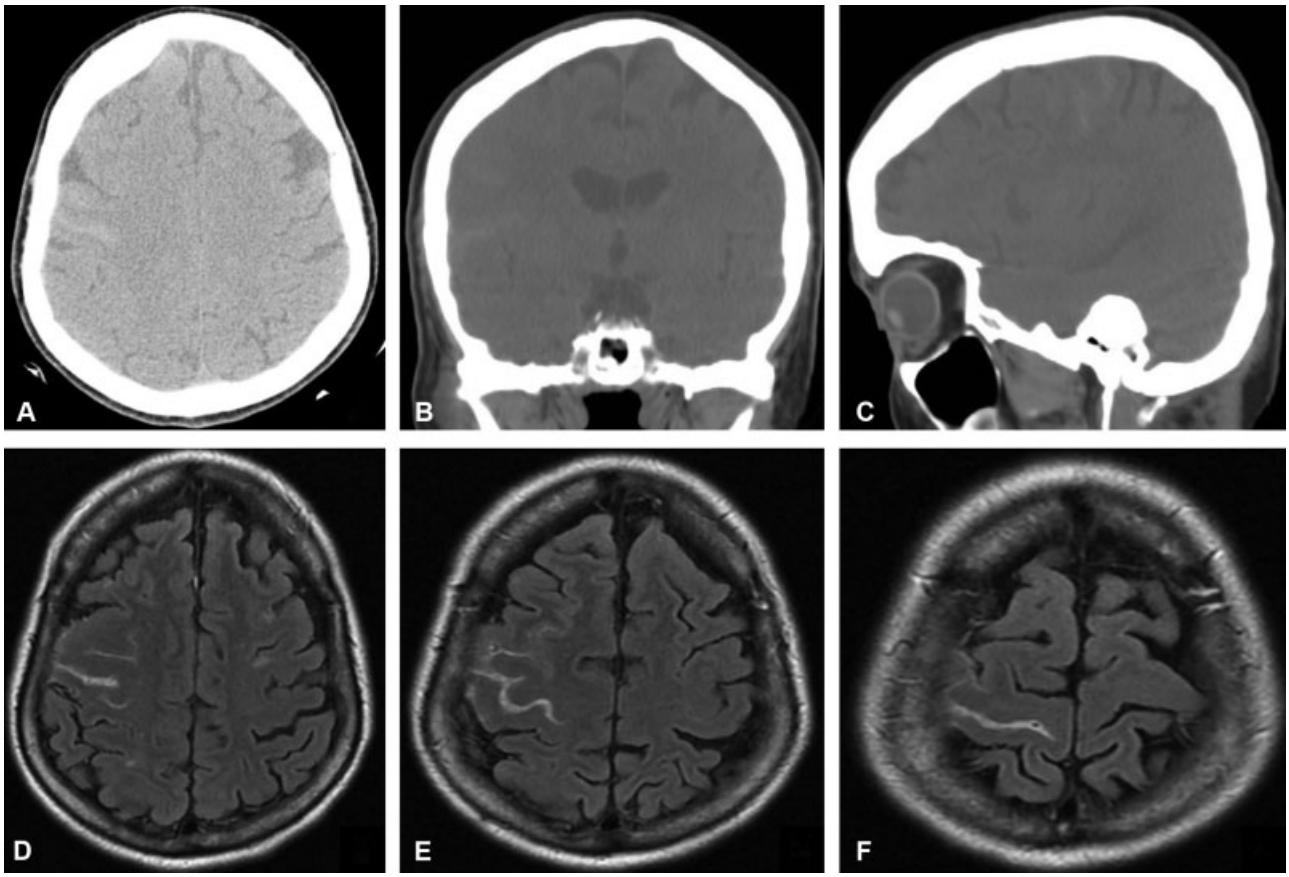

Fig. 1 (**A-C**) Axial, coronal and sagittal cranial computed tomography (CT) showing a hyperdense cortical lesion corresponding with a right convexity subarachnoid hemorrhage; (**D-F**) magnetic resonance imaging (MRI): axial T1-weighted gradient echo sequence image showing subacute right sulcal subarachnoid hemorrhage.

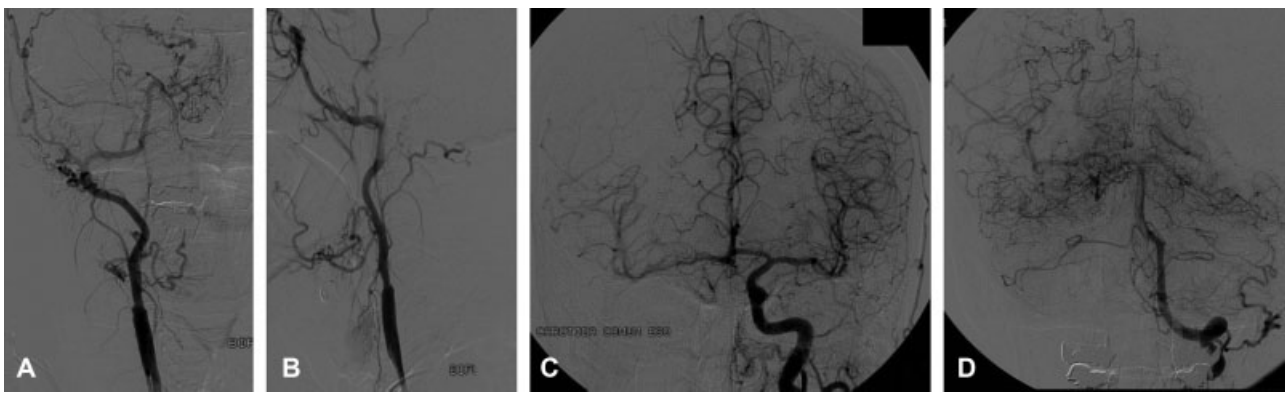

Fig. 2 Digital subtraction angiography (DSA): (**A-B**) antero-posterior and profile DSA of the right common carotid artery (CCA) showing occlusion of the right internal carotid artery (ICA); (**C-D**) vascularization of the right cerebral parenchyma by collateral circulation through the polygon of Willis, via the anterior and posterior communicating arteries respectively.

confirmed an asymptomatic occlusion of the right internal carotid artery (ICA) (►**Fig. 2**). Cases related to stenosis have already been described, but there is no similar report of a case related to occlusion, even though the pathophysiology of both entities is similar. Atraumatic SAH has been associated with intracranial and extracranial artery stenosis.[1]

Conflict of Interests
The authors have no conflict of interests to declare.

Reference

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