

Thrombus or plaque? The ultrasound as a diagnostic orientation tool in a primary care centre

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Abstract

We present a clinical case that shows a 73-year-old male diagnosed with plaque in the right internal carotid artery, the result of computerized axial tomography by an extension study of squamous cell carcinoma, shows a mural thrombosis. Ultrasound is performed in Primary Care shows a plaque that echographically looks like a thrombus and is referred to the vascular surgery service for study.

Case report

A 73-year-old male with a personal history of right and nasal facial epidermoid carcinoma, operated in 2016 and dyslipidemia in treatment under control with no other vascular risk factors in treatment with simvastatin 20 mg/day. No history of cardiovascular events or coagulation disorders.

This patient came to our clinic with the results of computerized axial tomography (CAT) with neck contrast for the extension study of facial epidermoid carcinoma ordered by the otorhinolaryngology department (OD). The results of the CAT: "Mural thrombosis in the carotid bulb with extension to the right internal carotid artery and stenosis of 65%". We decide to start antiaggregation (acetylsalicylic acid 100 mg/day) treatment and statins (atorvastatin 40 mg/day), furthermore the patients sent to the department of vascular surgery (VS). In the physical examination the patient was conscious, blood pressure: 130/80 mmHg and heart rhythm of 90 beats per minute. Pulmonary auscultation: regular heart sounds, conserved vesicular murmur. No murmurs are heard in the abdominal region and there weren't any neurological abnormalities. Ultrasound is performed in our primary care centre (PCC) finding plaque in the right internal carotid [1-3]: Hypoechoic, heterogeneous and calcified (posterior shadow) that echographically looks like a thrombus. (Figure 1). Following this finding we communicated with the reference department of VS and the patient is sent for we supraortic trunks ultrasound, which confirms the finding of the ultrasound performed at the PC. The angio-CT is reported as an atheroma plaque in the internal carotid artery that causes a 70% stenosis (Figure 2). Cerebral and aortoiliac CT scans are performed, without finding any alterations. The patient is treated with high intensity statin (atorvastatin 80 mg/day and antiaggregation (acetylsalicylic acid 100 mg/day).

Clinical diagnosis

Stenotic plaque in right internal carotid artery.

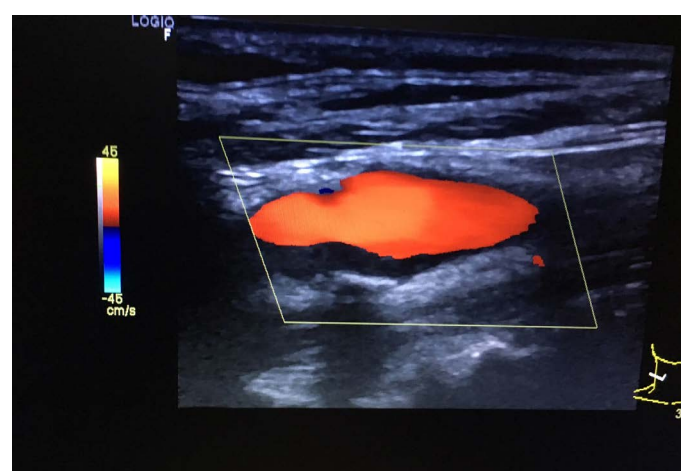


Figure 1. Ultrasound image of hypoechoic, heterogeneous and calcified plaque (posterior shadow) in right internal carotid that echographically looks like a thrombus.

Differential diagnosis

Mural thrombus.

Comments

The implementation of ultrasound in primary care can serve as an instrument for diagnostic guidance. In this case, using the ultrasound allowed us to guide the diagnosis and monitoring of an incidental finding in CT scan performed in hospital care. This permitted our

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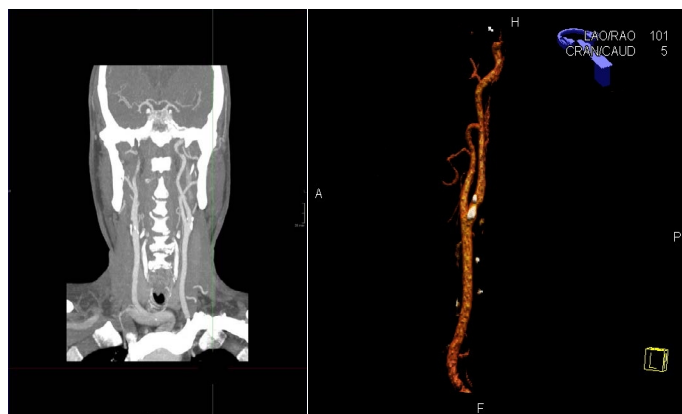


Figure 2. Angio-CT image of atheromatous plaque in the right internal carotid that causes a 70% stenosis.

primary care practice to forward the patient for vascular surgery evaluation and treatment in a prompt manner.

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