CAROTID ULTRASOUND AND INTRALUMINAL MOBILE ECHOES - DIFFERENTIAL DIAGNOSIS

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Introduction: Mobile intraluminal non-artifactual echoes in the carotid artery are rare findings. The differentiation between flapping atheromatous plaque, flapping thrombus, free-floatand even a combination of these with ultrasound is potentially difficult, in part due to the lack of precise description in the literature. It's potential embolic risk makes the diagnosis an important and urgent issue.

Methods: Retrospective and descriptive study including all patients referred to our Lab (LUSCAN) to perform carotid ultrasound, since 2007 to 2015. From the 7500 exams performed we selected the reports with mobile intraluminal non-artifactual echoes in the carotid artery and reviewed image's characteristics. We found five cases – two arterial wall adherent thrombus; a 'flap' associated with plaque rupture; and two thrombus adherent to atheromatous plaque. In all cases the diagnosis was made by carotid ultrasound. There was one female patient, ages between 35 and 88 years, one patient was asymptomatic. The symptoms were homolateral to carotid lesion. The two arterial wall adherent thrombus were associated with prothrombotic conditions: pregnancy and lung carcinoma. From the five patients, four had a different therapeutic approach due to ultrasound findings – were anticoagulated. We describe the five patients and compare our findings with the literature data.

Conclusion: Although rare, differential diagnosis of mobile intraluminal non-artifactual echoes in the carotid artery is crucial due to the need of further investigation of inherent causes and different therapeutic approaches.