

Carotid body tumor. Images of two cases, one with external carotid artery compression

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Case 1: A 35-year-old female with no pathological history consulted for a patent pulsatile painless mass in the left side of the neck. Palpation evidenced an approximately 3 cm in diameter mass and an important systolic murmur at that level. A color Doppler ultrasound of the neck vessels was requested, revealing carotid body tumor (CBT) (Figure 1). Case 2: An 87-year-old, hypertensive female, consulted for six-month evolution of dizziness episodes of varying duration and spontaneous remission. Right cervical asymmetry was observed, and right neck palpation revealed a mobile painless mass of approximately 3 cm in diameter. The patient reported mild dizziness upon cervical lateral movement. The neck vessel echo-Doppler showed a CBT and decreased external carotid artery diameter without internal atheroma-tous plaques (Figure 2).

In both cases, the patients refused further studies.

CBT are rare, infrequent, hypervascularized slow-growing neoplasms (0.01% of the population), derived from the paraganglionic cells of the neural crest, which represent almost half of all paragangliomas.

They are generally benign and usually present as an asymptomatic neck mass. Therefore, the diagnosis

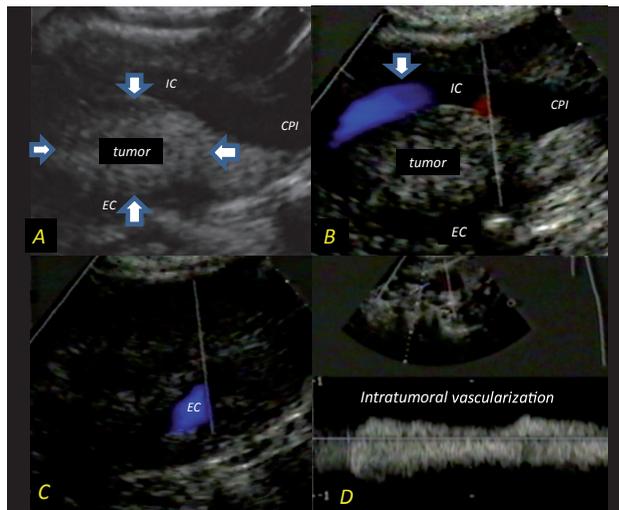


Fig. 1. A. Two-dimensional ultrasound. Between the arrows a hypoechoic image is observed between the left carotid bifurcation displacing the internal carotid (IC) artery outer and the external carotid (EC) inner (CBT). B. Color Doppler ultrasound. IC (arrow) and EC (C) are permeable without turbulence. D. Pulsed Doppler. The characteristic intratumoral vascularization is observed.

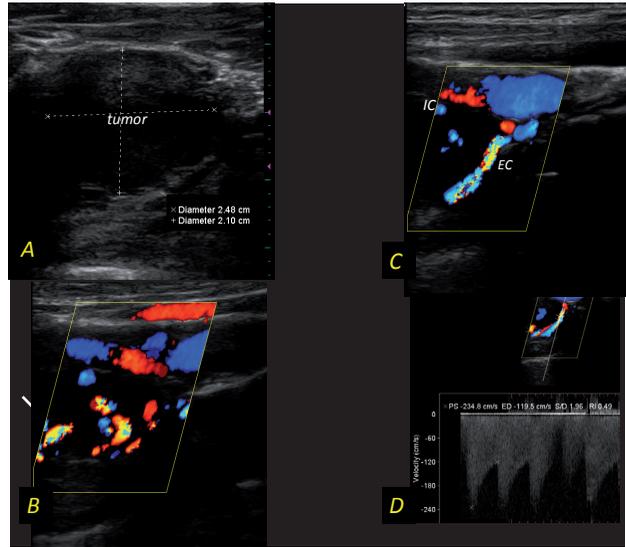


Fig. 2. A. Two-dimensional ultrasound. A hypoechoic image measuring 24 × 21 mm is observed (CBT) of. B. Color Doppler that highlights the intratumoral vascularization. C. EC artery without atheroma, with characteristic turbulence caused by increased velocity. D. Pulsed Doppler in EC shows significant increased systodiastolic velocities.

of these tumors is late, as it may be many years until patients request medical attention.

Complications are rare and occur in Shamblin's class II and III tumors. Type I: small, easily resectable tumors; type II: medium size tumors, partially surrounding and compressing the carotid vessels but still resectable, type III: tumors completely surround the carotid arteries and their removal requires partial or complete vessel resection.

Conflicts of interest

None declared

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