Bilateral Carotid Body Paraganglioma
Paraganglioma Bilateral do Corpo Carotídeo

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A 28-year-old woman presented with a 2-year history of a slow-growing, non-tender and pulsatile mass in the right carotid bifurcation. The computed tomography study (Fig. 1) revealed the hypervascular characteristics of paraganglioma (PGL): a well-circumscribed expansile mass with intense contrast enhancement. Additionally, a small left carotid mass was also identified. Hormonal evaluation revealed high levels of plasma catecholamine metabolites. A successful staged excision of both tumors was performed. The PGL gene panel testing was positive for a SDHD gene mutation, c.3G > C.

Carotid body PGL is mostly a sporadic, non-functioning and benign tumor. Imaging studies are important for the diagnosis due to its contraindication for biopsy.1 Bilateral/multiple lesions, younger age, presence of family history or syndromic features, and malignant tumor can raise the possibility of a hereditary disease.2,3 Mutations in genes encoding mitochondrial enzyme, succinate dehydrogenase (SDH)-subunit B and D, are common among head and neck PGL.3 The modality of treatment depends on whether the tumor is functioning or has a mass effect.

Figure 1 – CT scan showed bilateral well-defined hypervascular masses, isodensity to muscle (A) and vivid contrast enhancement (B), at right and left carotid bifurcations (Arrow)