

## Genetics and Pharmacogenomics

### 3.7 A Black Cardiac Paraganglioma in a Patient Carrier of SDHD Mutation

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We report a case of a 69 year old woman admitted to our hospital with a worsening dyspnoea in the last three months. In the past she had surgical removal of mediastinic paraganglioma and a removal of paraganglioma of left carotid glomous; arterial hypertension since 15 years before with a satisfactory control of blood pressure with anti-hypertensive drugs.

A transthoracic echocardiography showed a mass (size 31 x 38 mm) adherent to back wall of right atrium, a MRI of heart confirmed the presence of this mass. Then, a surgery treatment was performed but the atrial mass have been incompletely removed because involved the septal lemnus of tricuspidal valve and superior wall of coronary sinus as far as atrio-ventricular junction; during the operation there was a transitory increase of arterial pressure (PA 180/100 mmHg, FC 92 bpm). The histopathological examination of the removed mass showed the feature of a black paraganglioma.

Because of personal history, the site and the histopathological features of the removed lesion paraganglioma/pheochromocytoma syndrome was suspected.

The genetic analysis revealed a an insertion into 4th exon of SDHD gene (444-445 ins ATCT) on heterozygosity, this alteration has not never been reported before. The diagnosis of paraganglioma/pheochromocytoma syndrome type 1 (PGL 1) (OMIM 168000) was made.