Search for comorbidities before the surgery of aortic stenosis

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Calcific aorta stenosis (AS) is a progressive disease often occurring at an older age, when comorbidities increase the risk of operation. It is important to consider the cause of the symptoms, because similar symptoms may exist at different types of diseases. One of the most frequent comorbidities is chronic obstructive pulmonary disease. Can we get to the core of the matter properly to explore the most important information before the intervention?

A 67-year-old man had hypertension, chronic obstructive pulmonary disease, and calcific AS from 2010. Three years later he complained about severe dyspnoea, dizziness with fatigue. The transthoracic echocardiogram showed severe aortic stenosis (Panel A). Before the operation a chest X-ray was done without revealing any special problem and the respiratory test was good enough for aortic valve replacement (AVR). Some weeks after the successful surgery, he continued to complain about dizziness. Magnetic resonance imaging of the brain was performed. It detected a significant tumour (4 × 4 cm) in the left side of the cerebellum compressing the trunk and the fourth chamber of the brain (Panel B and C). The tumour could be completely removed with urgent cranietomy. The histological substrate showed metastasis cerebra. Biopsy was defined by microscopy haematoxylin and eosin-stained section, small-cell-lung carcinoma (SCLC), as primary tumour. Immunohistochemically the tumour cells show dot-like positivity for cytokeratin and chromogranin-A, and usually nuclei positivity for TTF1 (Panel D), which is very malignant, and in general, cause mortality before it is revealed.