MIBG-SPECT/CT-angiography with 3-D reconstruction of an extra-adrenal phaeochromocytoma with dissection of an aortic aneurysm

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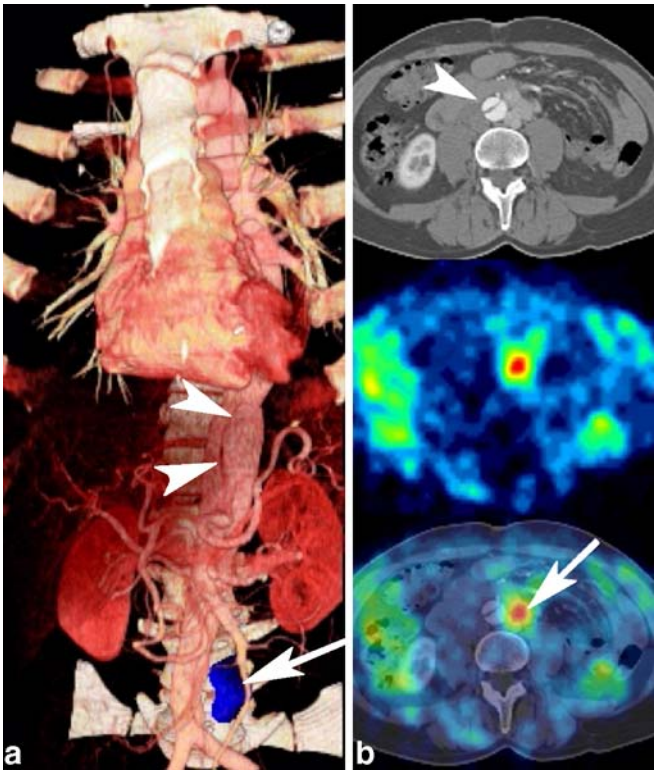
Phaeochromocytomas can cause severe complications like stroke, lung oedema, myocardial infarction or aortic dissection. Ten percent of phaeochromocytomas originate in extra-adrenal localisations and can be detected with ^{123}I-MIBG scintigraphy [1]. We report on a 50-year-old patient with weight loss, night sweating and increased urinary noradrenaline levels. SPECT with 358 MBq ^{123}I-MIBG and additionally a dual-phase diagnostic CT were performed, showing increased MIBG uptake para-aortally on the left side (**a**,**b**, *arrow*) corresponding to a hypervascularised lesion visible on CT (**b**, *arrow*) [2]. Additionally, in CT a thoracic aneurysm with type B aortic dissection (**a**,**b**, *arrowheads*) was detected. For surgical planning, CT-angiography and SPECT were combined in a fused 3D rendering using the PMOD 2.75 software (see figure). The paraganglioma was resected and 1 month later the aneurysm was successfully treated with a stent graft. There are some case reports in the literature about phaeochromocytomas associated with aortic or carotid dissections [3–5]. SPECT/CT-angiography with fused 3D reconstruction requires appropriate software and some postprocessing time but provides the surgeon with important functional and morphological information for adequate therapy planning. ^{18}F-DOPA PET/CT could be another interesting tool for imaging of such patients [6].



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