

Abnormal accumulation of [¹⁸F]fluorodeoxyglucose in the aortic wall related to inflammatory changes: three case reports

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We present 3 cases with abnormal accumulation of FDG in the aortic wall. Their clinical manifestations were vague or asymptomatic, and laboratory data were consistent with inflammatory reaction. These 3 patients were diagnosed with Takayasu arteritis, inflammatory aortic aneurysm (IAA), and retroperitoneal fibrosis (RF), respectively. FDG-PET and CT images showed the intense FDG uptake corresponding to the arterial walls and/or the soft tissue density surrounding the artery. It was deduced that FDG was probably taken up by inflammatory cells which infiltrated the arterial walls and/or the soft tissue mass. These cases indicated that FDG-PET is a useful method for localization of inflammatory lesion in patients with unspecific clinical findings and laboratory data.

Key words: Takayasu arteritis, inflammatory aortic aneurysm, retroperitoneal fibrosis, FDG, inflammation