18F-FDG-PET CT Findings in a Patient with Early-phase Cardiac Sarcoidosis

Taku Inohara, Toru Egashira, Jun Fujita and Keiichi Fukuda

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A 54-year-old man with clinically and pathologically diagnosed cutaneous, ocular and pulmonary sarcoidosis was referred to the Cardiology Department for a prolonged PR interval and intermittent advanced atrioventricular block (Picture 1A and B). Echocardiography, gallium-67 scintigraphy and cardiac magnetic resonance imaging revealed no evidence of cardiac sarcoid involvement. 18F-fluoro-2-deoxyglucose (18F-FDG) positron emission tomography (PET) computed tomography (CT) scanning performed after an 18-hour fast (Picture 2A and B) showed focal hypermetabolic activity localized to the left ventricular posterior septum that was highly suggestive of cardiac sarcoidosis. Although the case did not satisfy the criteria of the Japanese Ministry of Health and Welfare Guidelines for Diagnosing Cardiac Sarcoidosis, treatment with corticosteroids was selected based on clinical judgment. Following the administration of corticosteroid therapy (30 mg/day for one month), the intermittent atrioventricular block improved and the PR interval decreased from 336 to 184 msec (Picture 1C). Furthermore, 18F-FDG-PET CT showed an obviously reduced uptake of 18F-FDG in the myocardium and lymph nodes (Picture 2C and D).

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