

29. Scirica BM, Morrow DA. Is C-reactive protein an innocent bystander or proatherogenic culprit? The verdict is still out. Circulation 2006;113:2128–34; Discussion 2151.


**IMAGE FOCUS**

Visualization of pericarditis by fluorodeoxyglucose PET

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We describe a case of postpericardiotomy syndrome imaged by positron emission tomography (PET) with 18F-fluorodeoxyglucose (18F-FDG) and computed tomography (CT).

A 53-year-old woman had surgical aortic valve replacement with mechanical prosthesis due to severe aortic valve regurgitation. Within 1 month of surgery, she was diagnosed inflammatory pericarditis with 2 cm of excess pericardial fluid by echocardiography (Panel D, pericardial space between arrows). The postpericardiotomy syndrome responded well to colchicine treatment.

Two months after the operation she was re-admitted to the hospital because of fever, raised C-reactive protein level (275 mg/L) and leukocytosis. Blood cultures were negative and the procalcitonin level was normal (0.18 μg/L). Transoesophageal echocardiography showed normal function of the aortic valve prosthesis and no vegetations or other signs of endocarditis. There was only a small amount of pericardial fluid (up to 4 mm).

To detect focus of infection, PET and CT with 18F-FDG was performed. Physiological FDG uptake in the myocardium was efficiently suppressed by patient preparation with non-carbohydrate diet and overnight fast. However, there was strong metabolic activity surrounding the heart co-localizing with the pericardium (Panel A–C). Maximum standardized uptake value was 5.0. There was mild 18F-FDG uptake associated with the aortic valve prosthesis and few reactive lymph nodes in the thoracic area.

The 18F-FDG PET/CT revealed active postpericardiotomy syndrome. Treatment was continued with colchicine and corticosteroids, without antibiotics. Inflammatory markers and clinical condition normalized quickly.

To our knowledge, this is the first case showing pericardial inflammation by 18F-FDG PET/CT.