CASE IMAGE

Prosthetic aortic vascular graft infection due to left arm cellulitis

Sol kolda selülit sonrası görülen protez aort greft enfeksiyonu

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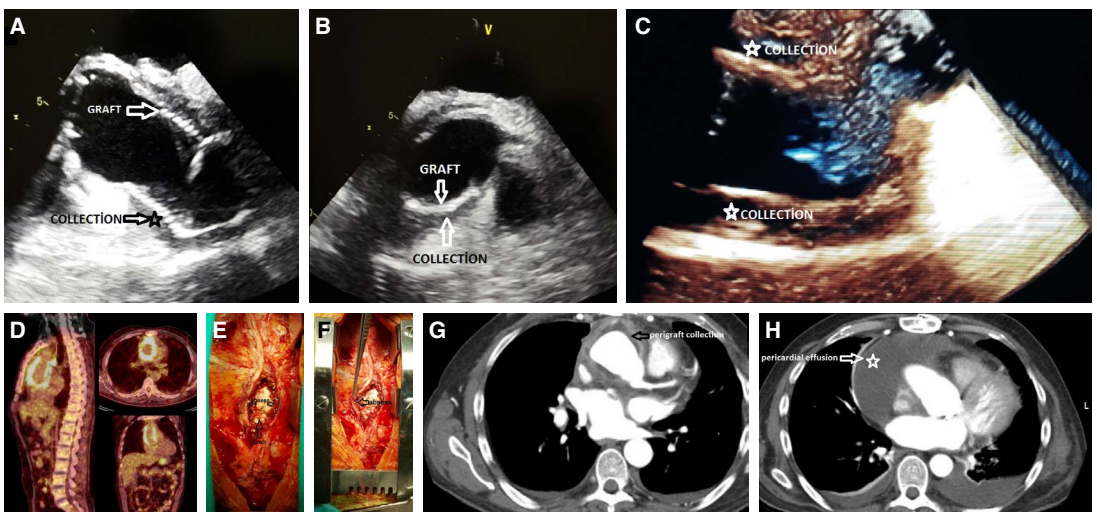
A 43-year-old-man presented with a fever, a skin rush on the left of the body, and splintering in the fingernails that had been ongoing for 1 month. A physical examination also revealed tachycardia and fever. The patient's blood pressure was 130/90 mm Hg. His left arm was erythematous and swollen. A cardiopulmonary examination was normal with the exception of metallic valve sounds. The electrocardiography results were normal. Blood analysis findings indicated the presence of leukocytosis and an increased level of C-reactive protein (CRP), while other biochemical values were within normal limits. The medical history of the patient included an aortic coarctation operation at the age of 10 years and a Benthall procedure at the age of 20. Blood and skin swab cultures were obtained. The patient was treated with intravenous cefoperazone and clarithromycin for 2 weeks. Following treatment, the left arm edema and swelling had improved. After an initial response to antibiotherapy during the first few days, however, the fever relapsed and there was a renewed increase in sedimentation and CRP levels. The antibiotherapy regime was replaced with intravenous delivery of tigecycline and ampicillin for an additional 2 weeks, and an excellent response to the therapy was observed in terms of fever and inflammatory markers. Blood cultures taken during this period remained negative. However, the fever recurred following termination of the antibiotic treatment. Since infective endocarditis was now highly suspected, multimodality imaging was performed to attain a definitive diagnosis (Fig. A-C). Transthoracic and transesophageal echocardiography, as well as chest computed tomography (CT), showed fluid collection around the perigraft aorta, but no vegetation or dysfunction was observed in the aortic prosthetic valve. Fludeoxyglucose 18 positron emission tomography-computed tomography was performed and increased circumferential involvement was observed around the prosthetic aortic graft. The patient was diagnosed with a perigraft abscess (Fig. D). The patient was treated surgically (Fig. E, F) with the implant of a Dacron (E. I. du Pont de Nemours and Company, Wilmington, DE, USA) graft. No microorganisms were identified in the excised aortic graft culture sample, which was probably due to the antibiotics used before sampling. Polymerase chain reaction analysis for culture-negative endocarditis was not performed. One month after the operation, no fluid collection was observed around the perigraft aorta in the control CT and the patient was discharged with a full recovery (Fig. G, H).



Figures– (A-C) Two-dimensional (2D) and 3D transesophageal echocardiogram images demonstrating perigraft fluid collection without valvular vegetation or disfunction. **(D)** A fludeoxyglucose 18 positron emission tomography-computed tomography image illustrating increased activity consistent with infection of the prosthetic graft of the ascending aorta. **(E, F)** An intraoperative photograph demonstrating the perigraft aortic abscess. **(G)** A computed tomography image demonstrating perigraft fluid collection; **(H)** After treatment, there was no visible perigraft fluid collection, but pericardial effusion was observed.