

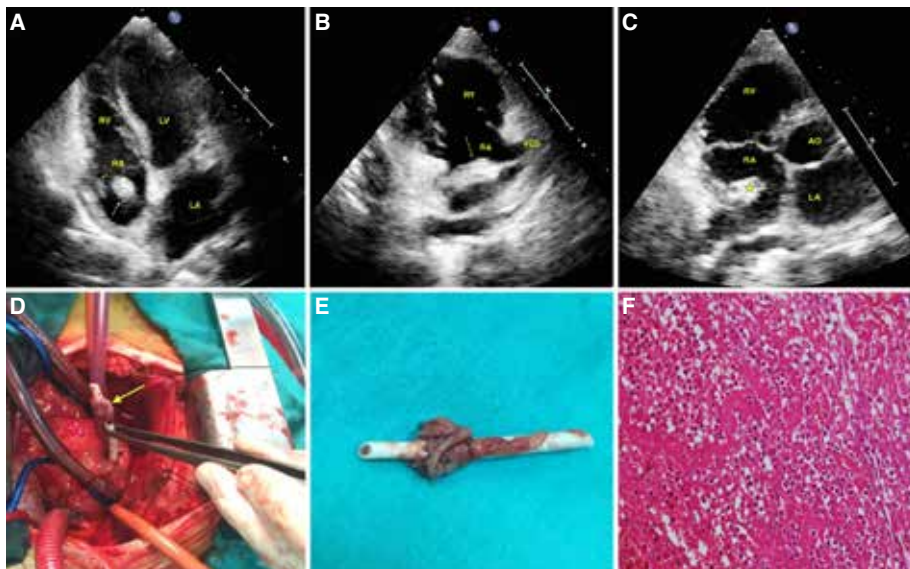
Catheter tip covered by mass in the right atrium: An unusual example of infective endocarditis

Enfektif endokarditin alışılmadık bir örneği: Sağ atriyumda kateter ucunu saran kitle

Çetin Geçmen
Gonca Geçmen*
Muzaffer Kahyaoğlu
Suzan Hatipoğlu
Mehmet Aksüt
Department of Cardiology,
Kartal Koşuyolu Heart &
Research Hospital, İstanbul,
Turkey
*Department of Pathology,
Dr. Lütü Kırda Kartal
Training and Research
Hospital, İstanbul, Turkey

A 34-year-old female who had undergone small intestine resection due to mesenteric artery embolization a year prior was referred to the cardiology department. The etiology of the embolization had not been determined, and follow-up with the gastroenterology department was recommended. A feeding catheter was inserted into the right subclavian vein and the patient received parenteral nutrition in the gastroenterology department for approximately 4 months. The patient experienced fever and fatigue lasting 1 week, and had high C-reactive protein and procalcitonin levels, as well as leukopenia and thrombocytopenia. Echocardiographic examination revealed a hyperechogenic mobile mass

on the tip of the catheter in the right atrium (Figure A, Video 1*). Modified echocardiographic view showed the catheter in the superior vena cava, and a mass of approximately 25x15 mm (Figure B). No vegetation was present on the tricuspid valve or on other cardiac structures (Figure C, Video 2*). Two blood cultures drawn >12 hours apart were positive for *Staphylococcus hominis*. Antibiotic treatment of daptomycin, anidulafungin, and imipenem-cilastatin was initiated for infective endocarditis. The patient was referred to cardiovascular surgery. Surgical removal was performed under general anesthesia. Macroscopy in the surgical theater confirmed the presence of vegetation, which had covered the tip of the catheter in the right atrium (Figures D, E). Pathologic examination revealed acute fibrinous exudates with neutrophils, necrotic changes, and tissue destruction (Figure F). Fungal stains, as well as those for acid-fast organisms were negative. In light of the clinical data, it was determined that the present was a case of infective endocarditis and full-course antibiotic treatment was continued.



Figures– (A) Transthoracic echocardiography showing hyperechogenic (arrow) and mobile mass (dotted arrow) in the right atrium. (B) Modified transthoracic echocardiography showing the catheter in the superior vena cava and the mass (arrow) in the right atrium. (C) Transthoracic echocardiography showing normal tricuspid valve and hyperechogenic mass (asterisk). (D) Surgical view showing the mass that had covered the catheter. (E) Macroscopy of the vegetation around the catheter. (F) Pathologic examination showing acute fibrinous exudates with neutrophils. AO: Aorta; LA: Left atrium; LV: Left ventricle; RA: Right atrium; RV: Right ventricle; VCS: Vena cava superior. *Supplementary video files associated with this presentation can be found in the online version of the journal.