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Percutaneous Extraction of Catheter Trapped in the Right Ventricle

Sağ Ventrikülde Sıkışan Kateterin Perkütan Çıkarılması

63-year-old Caucasian male was referred by a cardiac surgeon to our clinic for the percutaneous removal of an entrapped venous catheter within the heart. The patient had been diagnosed with rectal adenocarcinoma with a pathogenic mutation in the NRAS gene. Following a colectomy, he underwent 12 biweekly sessions of chemotherapy via a port catheter inserted into the right subclavian vein. During surveillance imaging, he was rescheduled to receive chemotherapy, during which the port was found to be malfunctioning. A chest X-ray revealed a fractured piece of the catheter entrapped in the right ventricle (Figure 1A). Consequently, a new permanent venous catheter was inserted into the left subclavian vein. The right common femoral vein was cannulated, and a 7-French sheeth was introduced. A 6-French pigtail catheter was advanced into the right ventricle, looped around the fractured catheter, and pulled back toward the right common iliac vein (Figure 1B). Subsequently, a 4-French snare catheter was used to extract both the broken catheter and the sheath simultaneously (Figures 1C and 1, Video 1). A postprocedural chest X-ray confirmed the absence of intracardiac catheter remnants (Figure 1E). The patient was discharged home without any complications. The most challenging aspect of the procedure was the maneuvering the pigtail catheter in the presence of another venous catheter in the right atrium. Additionally, care was taken to avoid using the snare catheter for intraventricular extraction of foreign bodies to prevent injuries to ventricular structures. The patient remained under follow-up for colorectal cancer surveillance for six months. Informed consent was obtained from the patient.

Informed Consent: Informed consent was obtained from the patient.

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Video 1. Interventional techniques for extracting an intracardiac venous catheter.



Figure 1. (A) Chest X-ray showing the foreign body before extraction. (B) Pigtail catheter used for removing the foreign body. (C) Snare catheter used for extraction of the foreign body. (D) Extracted venous catheter. (E) Post-procedural chest X-ray.



CASE IMAGE OLGU GÖRÜNTÜSÜ

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