

Percutaneous extraction of an intravascular guidewire retained for 1.5 years

A 47-year-old woman presented with dyspnea. Endovenous laser ablation of varicose veins was performed 1.5 years ago. A linear radiopacity, extended to the external jugular vein, was observed in the right side of the upper mediastinum on postero-anterior chest X-ray (Fig. 1a). A 0.038-inch J guidewire was observed on computed tomography (Fig. 1b). The patient was taken to the catheterization laboratory for percutaneous extraction of the guidewire. The location of the distal part of the guidewire was determined using angiography (Video 1). The guidewire was extended from the inferior vena cava to the right external jugular vein. The snare system was used in an attempt to retrieve the distal part of the guidewire (Video 2). The snare system was advanced into the inferior vena cava through the 6F JR4 catheter and was used in an attempt to retrieve the distal part of the guidewire. Mild resistance was encountered due to adhesions around the guidewire when the snare system was advanced into the inferior vena cava (Video 3). The proximal part of the J guidewire was locked by the EN snare system (Merit Medical, South Jordan, UT, USA) under the endoscope and was extracted through the sheath in the right femoral vein (Fig. 2a). There was no intra- or postoperative complication. Angiographic images were taken after the guidewire was extracted (Video 4). Prior to discharge, her chest X-ray was normal (Fig. 2b).

Foreign bodies are generally found in the superior vena cava, pulmonary artery, or the right side of the heart and are associated with life-threatening complications. Percutaneous extrac-

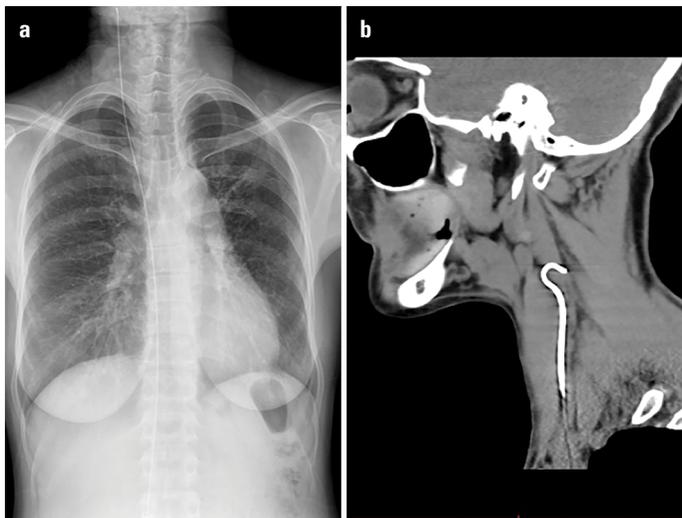


Figure 1. (a) A linear radiopacity, extended to the external jugular vein, was observed on posteroanterior chest X-ray. (b) A 0.038-inch J guidewire was observed on computed tomography, and the distal part of the guidewire was detected in the external jugular vein

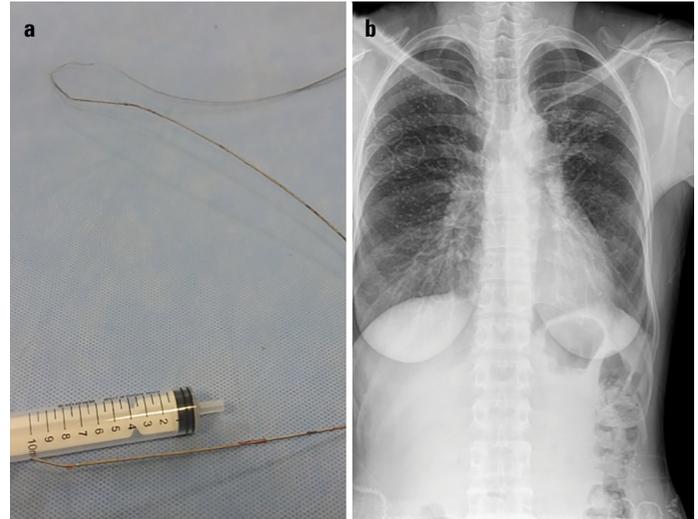


Figure 2. (a) The guidewire was extracted through the sheath in the right femoral vein. (b) Chest X-ray was normal

tion is accepted as the gold standard for the retrieval of intravascular foreign bodies because it is currently associated with a low complication rate. The snare system is frequently used as the first choice for the retrieval of foreign bodies. In the present case, the guidewire was successfully retrieved using the endoscope. Even if patients are asymptomatic at the time of diagnosis, the retrieval of foreign bodies is strongly recommended.

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Video 1. The location of the distal part of the guidewire was determined by angiography.

Video 2. The snare system was used in an attempt to retrieve the distal part of the guidewire.

Video 3. Mild resistance was encountered due to adhesions around the guidewire when the snare system was advanced into the inferior vena cava.

Video 4. Angiographic image taken after the guidewire was extracted.

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