

# Successful Use of the ONE Snare® System in Retrieval of a Guidewire Looped around a Right Subclavian PICC

Varun G. Ramakrishnan<sup>1</sup>, Wilfred Furtado<sup>2</sup>, Rian Holayter<sup>1</sup>  
University of Louisville School of Medicine<sup>2</sup>, Department of Radiology<sup>1</sup>

## Introduction

- Guidewires are a useful tool that allow for percutaneous introduction of placement catheters and various interventional devices
- Potential complications can result from guidewire use (kinking, vessel perforation, entanglement, etc.)
- The following case details the consideration, approach, and technique used to retrieve a guidewire looped around a right subclavian PICC using the ONE Snare® Endovascular Snare System
- Kinking, looping, or knotting of the guidewire typically occurs when persistent forward force is applied against fixed resistance
- Entanglement of a guidewire around an existing intravascular device can create risk for potential intravascular foreign body

## Methods

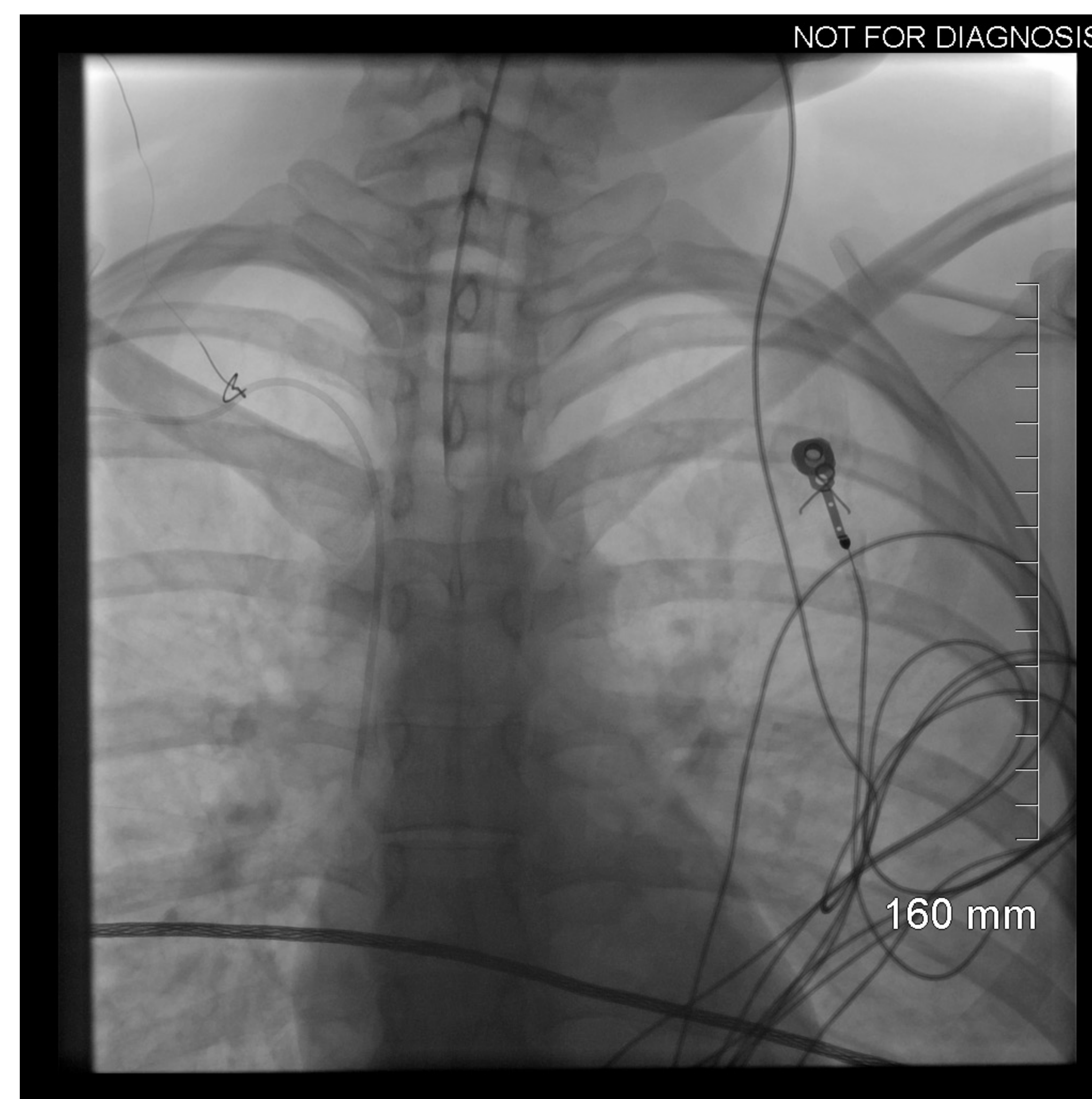
Retrospective chart review was performed with special attention to medical interventions, imaging results, and overall clinical course.

## ONE Snare® Endovascular Snare System



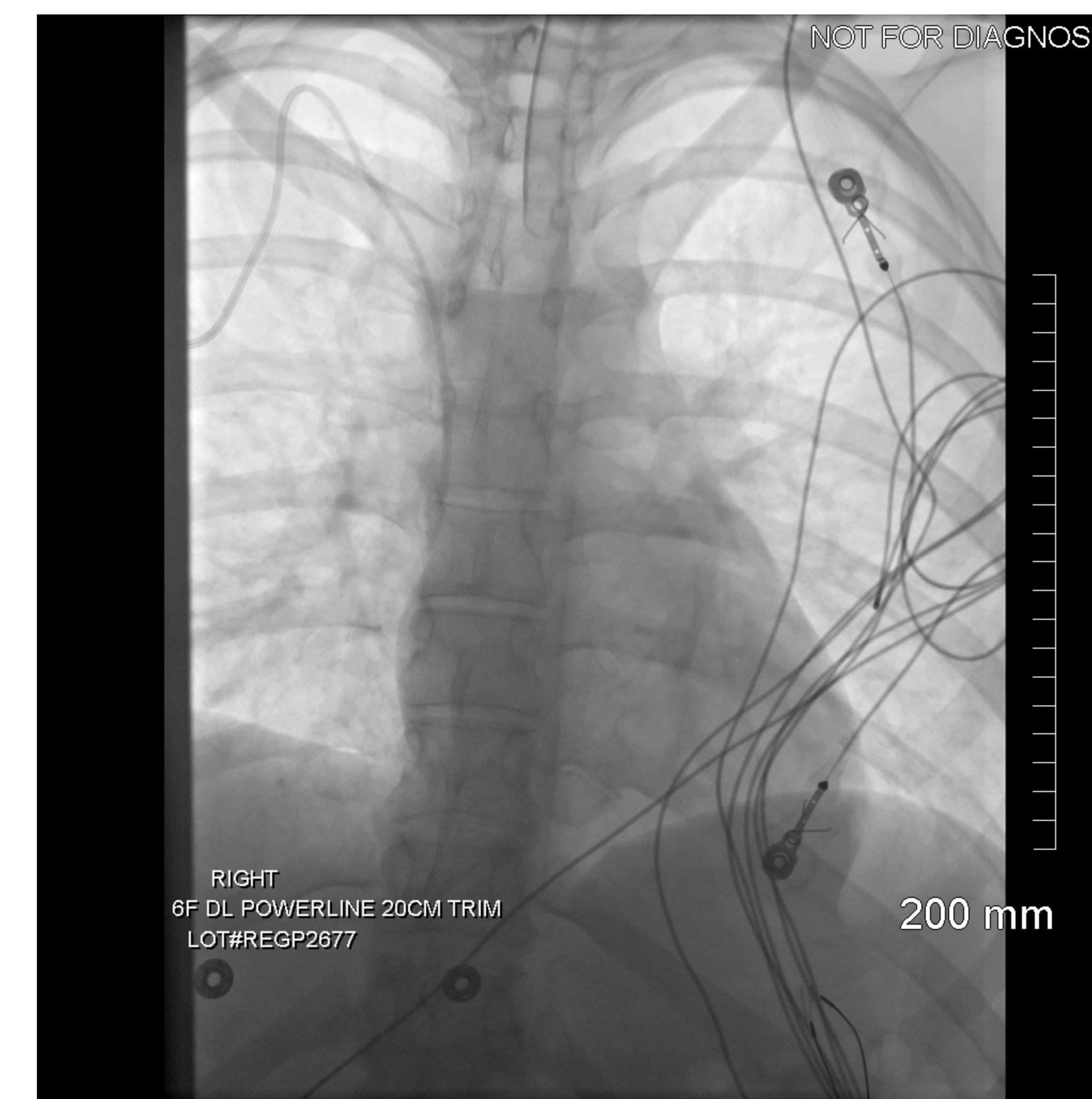
## Results

A 27-year-old female presented for exchange of a right subclavian PICC with a Hickman central venous catheter. Following trans-jugular advancement of a guidewire, fluoroscopy revealed the guidewire to be looped around the right subclavian PICC. Given the location of the entanglement, a right common femoral vein approach was utilized to simplify access. Successful retrieval was accomplished by use of a Merit Medical ONE Snare® Endovascular Snare System, with the entangled PICC and guidewire being removed without further complication.



Guidewire looped around a right subclavian PICC

Intervention →



Following removal of the entangled guidewire

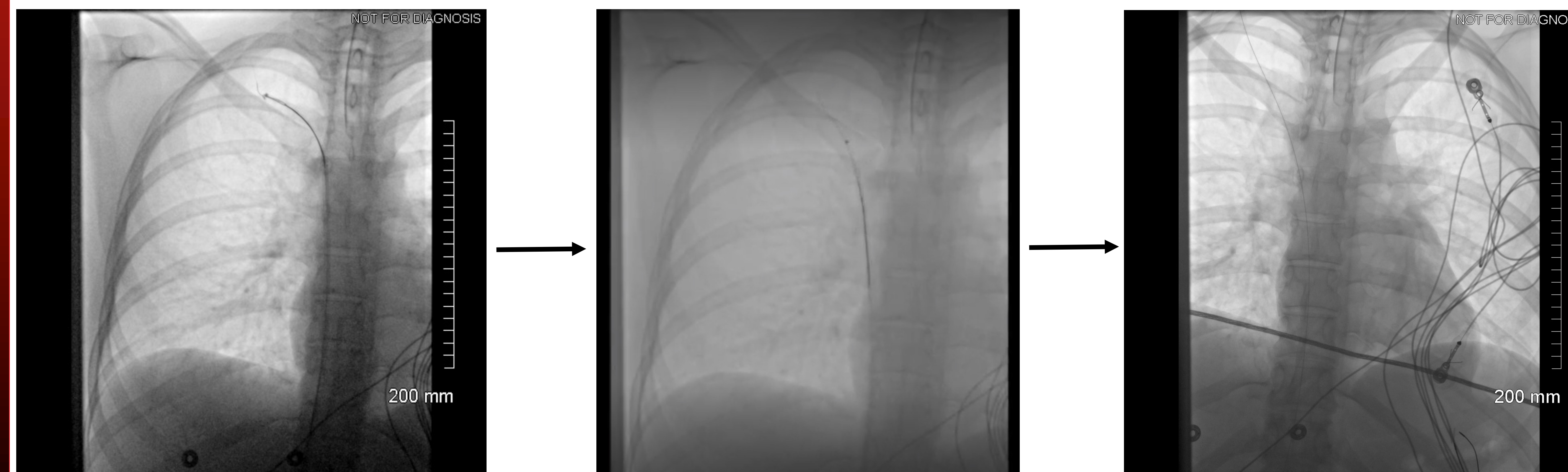
## Conclusions

- Entanglement of a guidewire around an existing intravascular device is a potentially serious complication that can create risk for intravascular foreign body
- Appropriate suspicion and prompt recognition with fluoroscopic guidance is required to accurately recognize and treat this complication
- Establishing a direct and simple retrieval approach is essential both to minimize further complications and ensure for successful retrieval

## References

Khasawneh FA, Smalligan RD. Guidewire-Related Complications during Central Venous Catheter Placement: A Case Report and Review of the Literature. *Case Rep Crit Care.* 2011;2011:287261. doi:10.1155/2011/287261

ONE Snare® Endovascular Snare System. Merit Medical. Accessed December 30, 2022. <https://www.merit.com/peripheral-intervention/intervention/snare-accessories/one-snare-endovascular-snare-system/>



ONE Snare® Endovascular Snare System inserted via a right common femoral vein approach