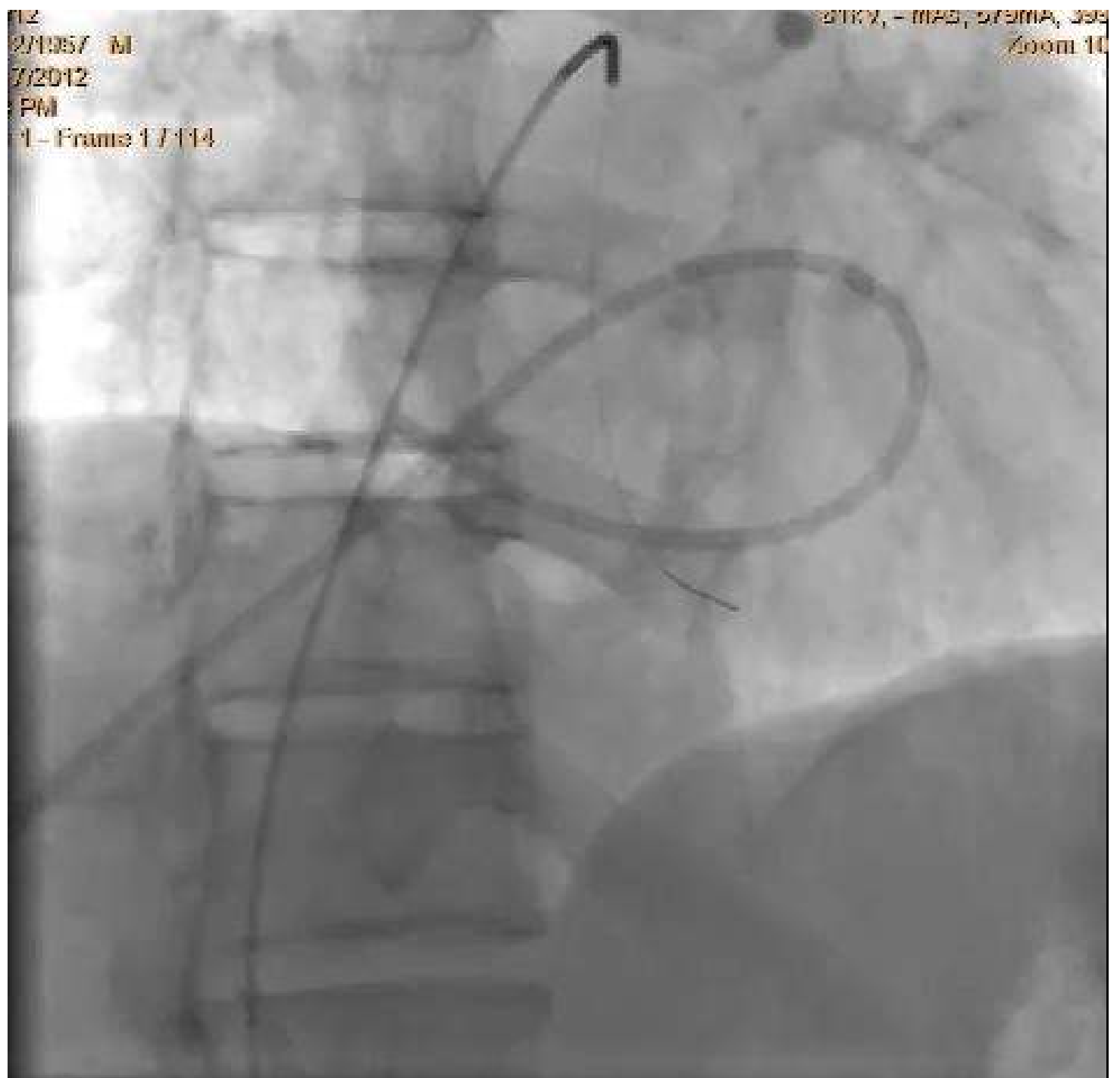


Migrated Central Venous Catheters

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Scout TF Angiogram



2/19/87 M
7/20/12
PM
1 - Frame 1174

Zoom 111

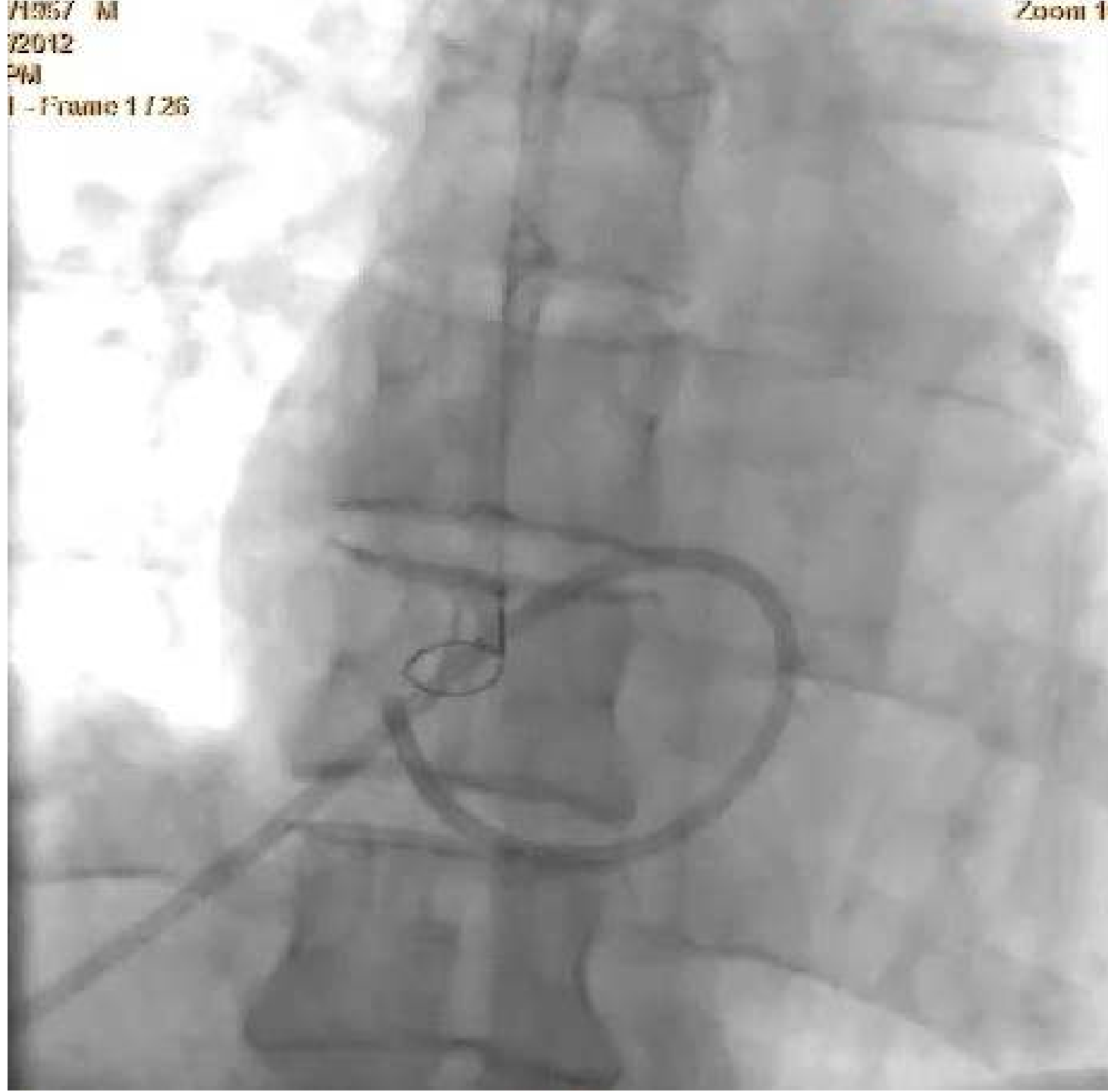


Transjugular angiogram

Snare failed
from above

71957 M
72012
PM
I - Frame 1126

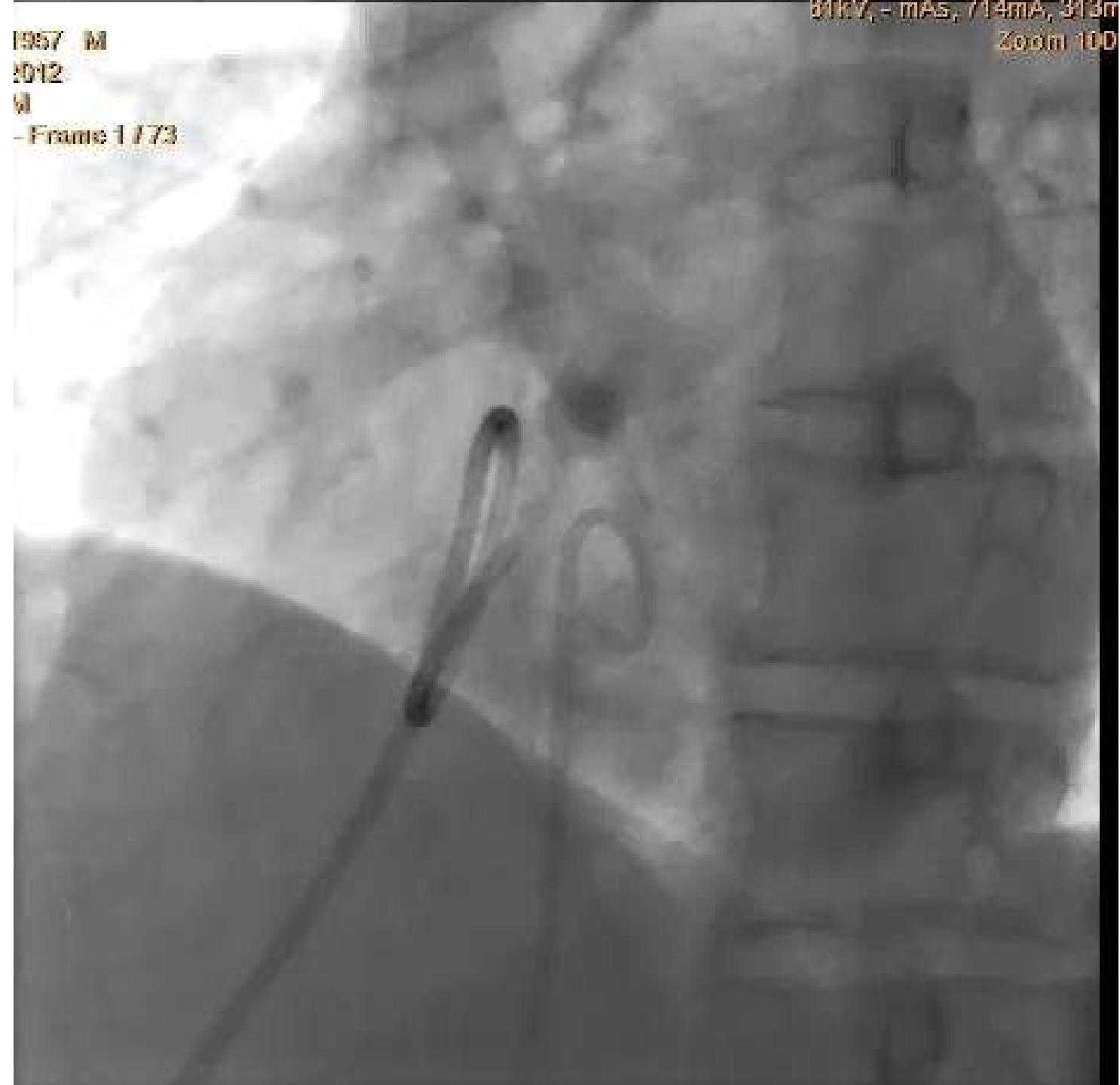
Zoom 1



1987 M
2012
W
- Frame 1173

81kV, - mAs, 714mA, 313m
Zoom 100

PT catheter



Unfortunately,
the moment of
extraction was
not recorded



Causes of catheter migration

- Inappropriate insertion technique
- Material defect/fatigue
- Patient factor

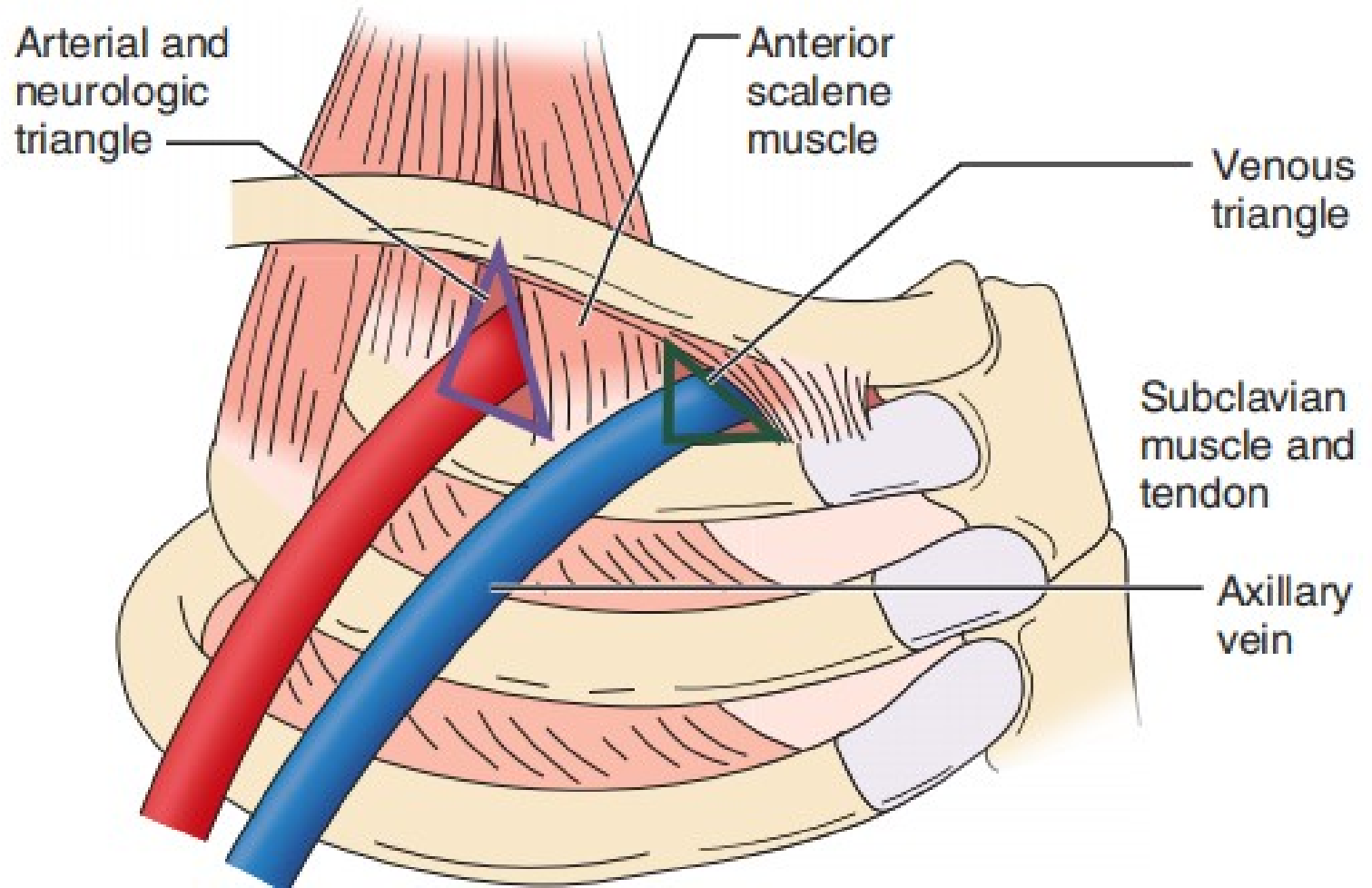
The pinch off syndrome

Of these causes, the 'pinch off syndrome' (POS) represents the commonest factor (40.9%) behind catheter migration after being inserted through subclavian vein.



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Grades of pinch off syndrome

Hinke et al.(1990) classified
the POS into 4 grades

- 0 = normal,
- 1= abrupt change In the course,
- 2= abrupt change in the course with luminal narrowing, and
- 3 = catheter fracture

Time to fracture

Eight in 112 cases of POS described by Mirza et al. (2004), 5.3 month was the average period between catheter insertion and occurrence of POS.

Where it dwells?

Migrated venous catheters remain

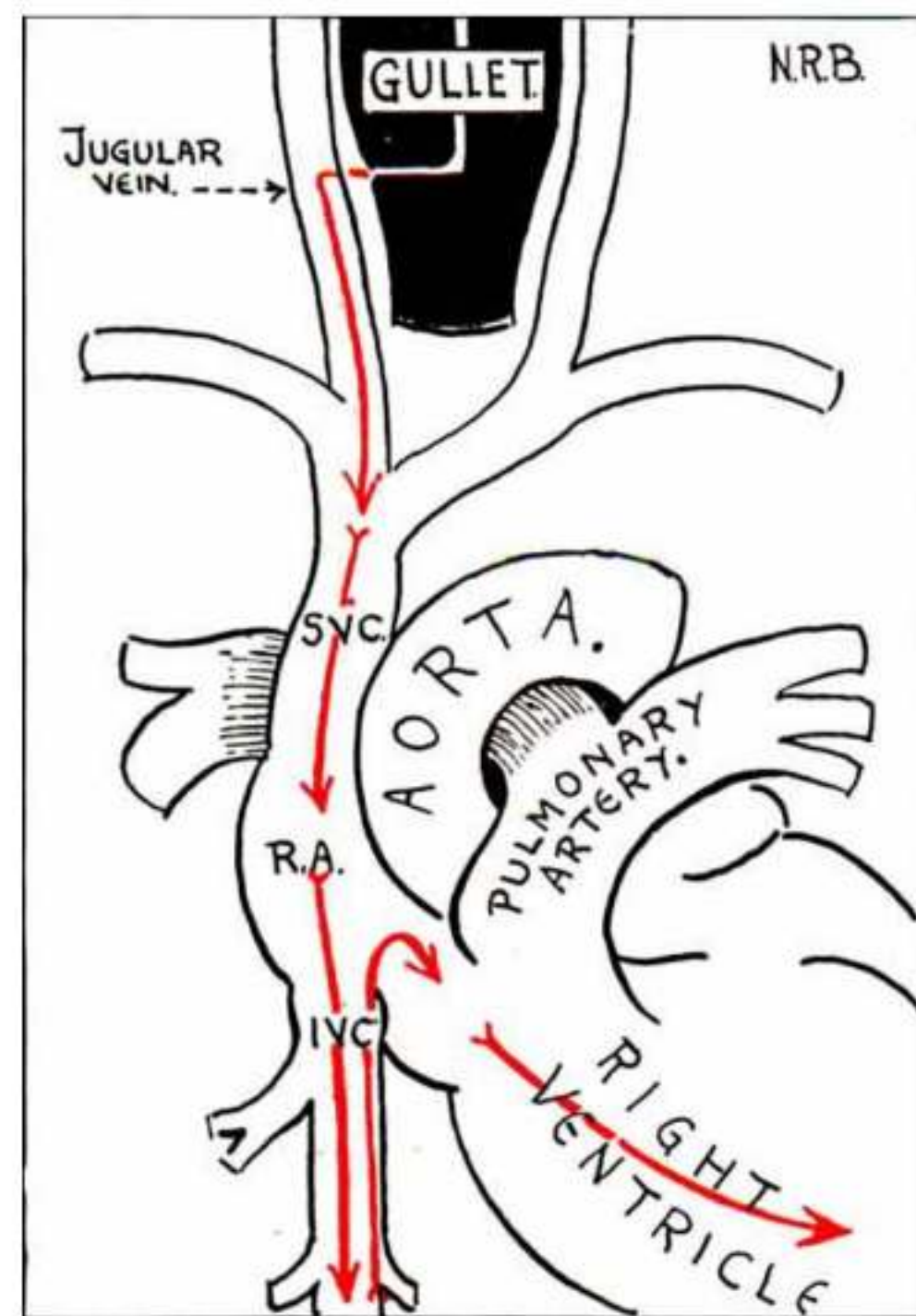
- in 46% of cases in the venous system,
- in 35% go to reside right side of the heart and
- 19% of instances reach the pulmonary artery.

Migration & Retrograde migration

Once inside a vein sterile foreign bodies are influenced by forces, which are generally opposed. The blood stream tends to sweep them towards the heart; gravity often pulls in the other direction. Objects, which float rise upwards, and others sink. 'Migration' and 'retrograde migration' are to be expected. The weight, size, shape, and consistency of an object are also concerned.

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Percutaneous retrieval

- Percutaneous retrieval of foreign bodies is currently used in more than 90% of cases. The success rate of this method amounts to 97.8% Safe, effective, easily reproducible and perhaps less costly makes the endovascular retrieval of migrated catheter the treatment of choice.



**Thank
k you**

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Migrated Central Venous
Catheters
VSE/AVSC, 2024**

