

Is Thrombectomy Indispensable ?

YES !!!

Christian Spaulding, MD, FESC, FACC

Cochin Hospital, Paris Descartes

University

Paris France

TAPAS Study: 1071 STEMI patients randomized

535 were assigned to
thrombus aspiration

33 did not undergo PCI
502 underwent primary PCI
295 underwent TA followed by
direct stenting
153 underwent TA with additional
balloon dilation
54 had crossover to conventional
PCI

530 complete follow-up at 1 year

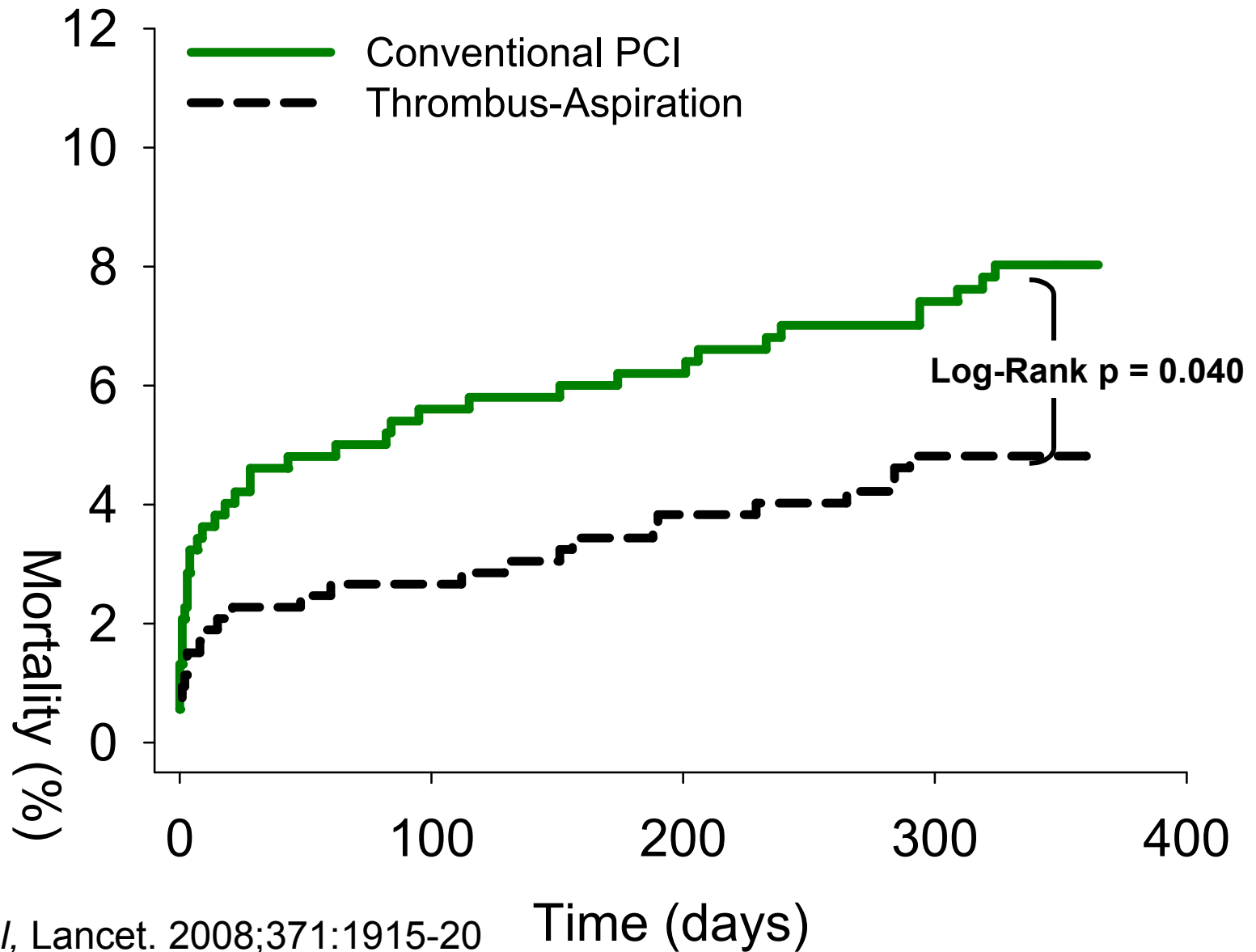
536 were assigned to
conventional PCI

33 did not undergo PCI
503 underwent primary PCI
485 underwent balloon dilation
followed by stenting
12 underwent conventional PCI
with additional TA
6 had crossover to TA

530 complete follow-up at 1 year

Svilaas T et al, N Engl J Med 2008; 358: 634-7

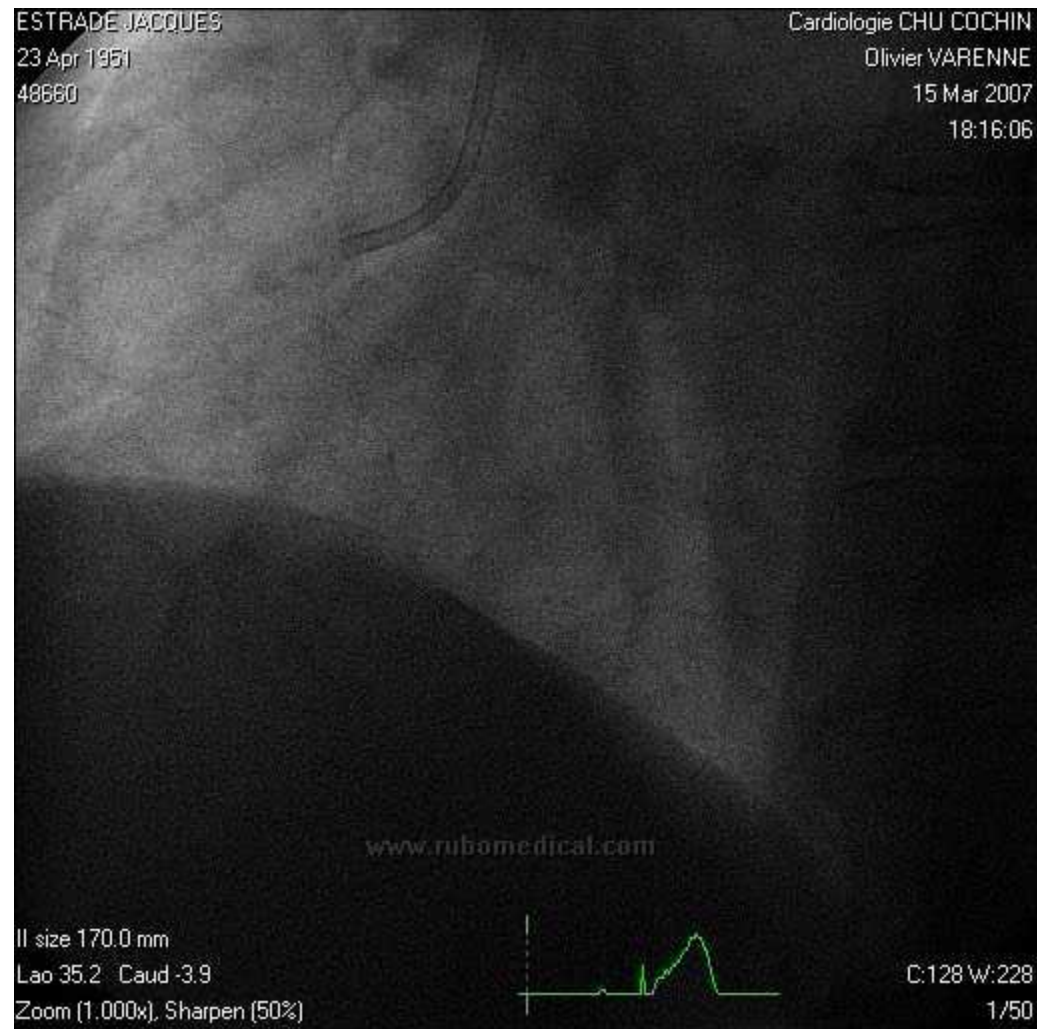
Mortality at 1 year



Why do some interventional cardiologists don't like thromboaspiration?

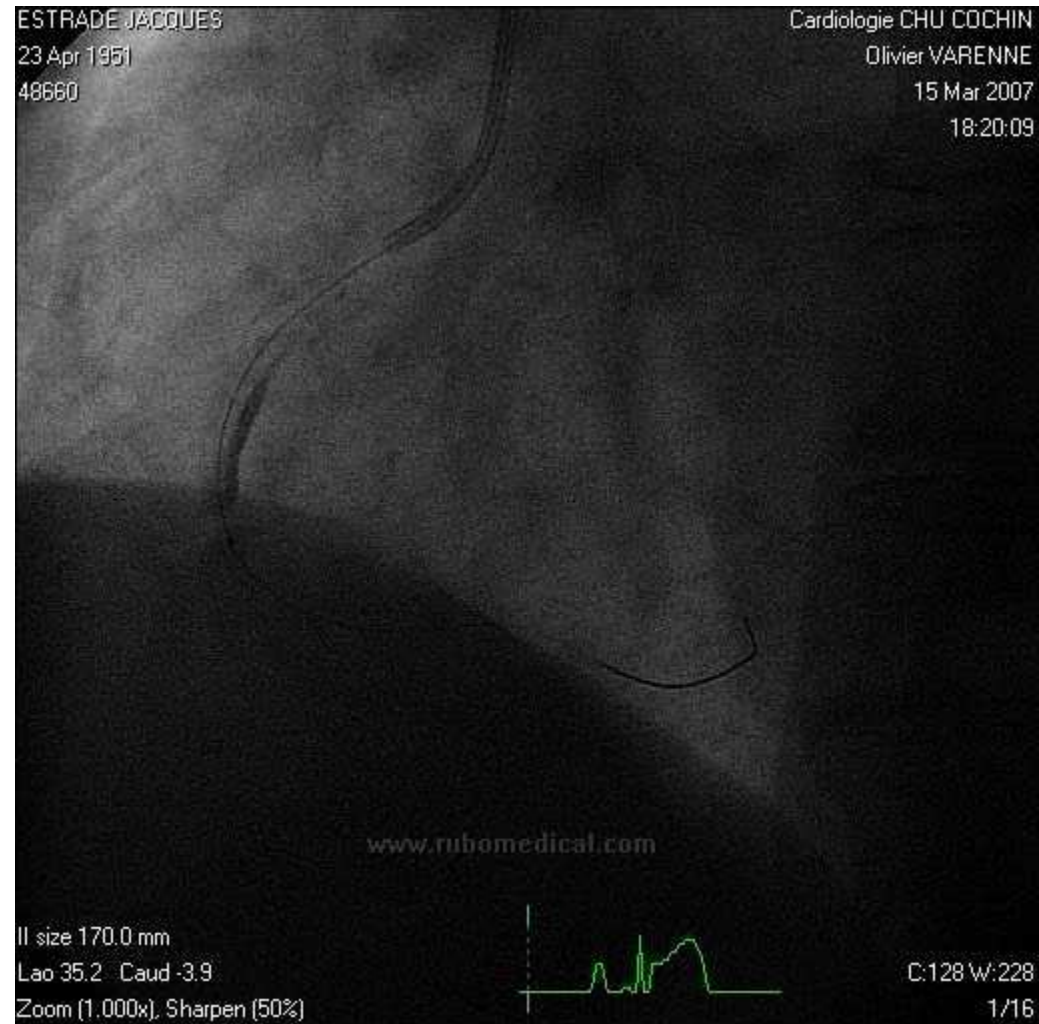
- They have had complications
- They don't know how to use it correctly
- They don't know what to do when it fails

Learning curve with thromboaspiration devices



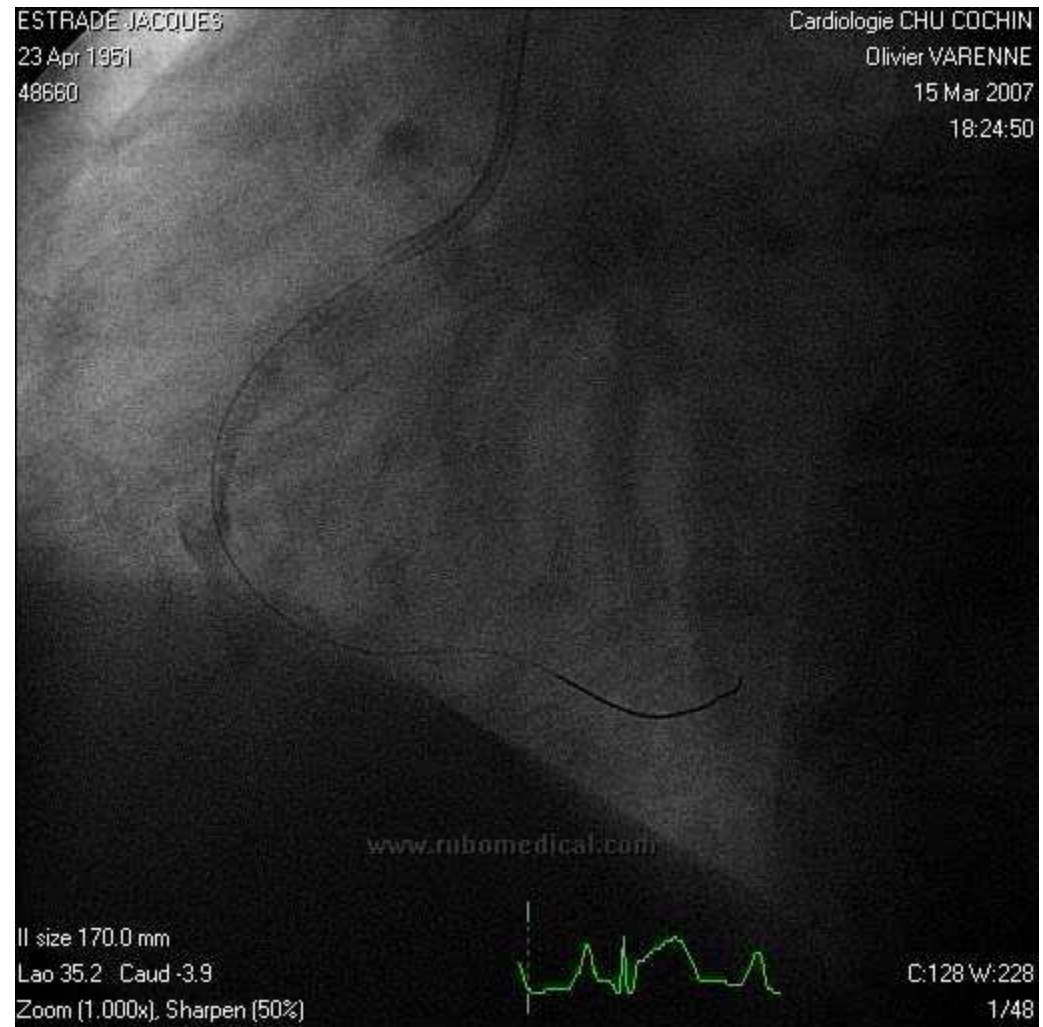
Learning curve with thromboaspiration devices

Thromboaspiration
6 French Export* catheter



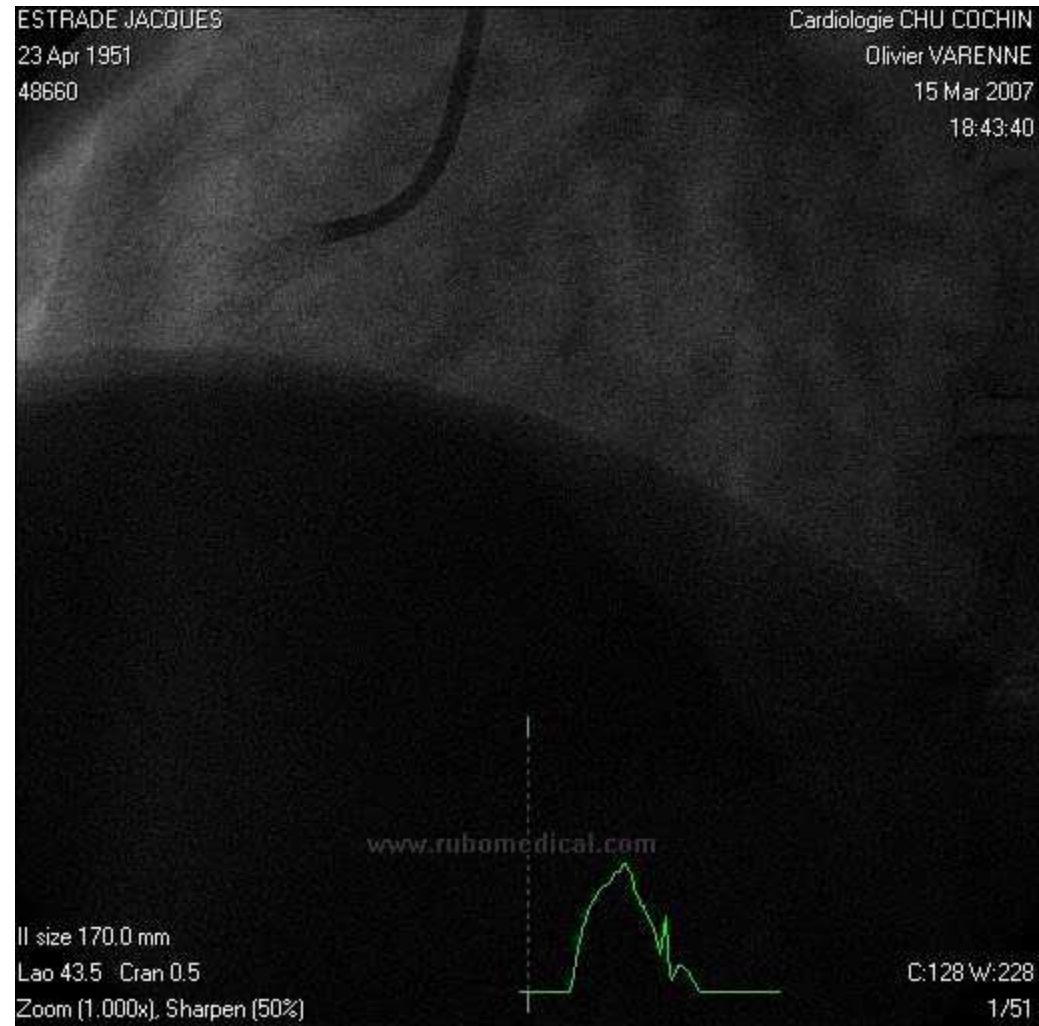
Learning curve with thromboaspiration devices

Extensive dissection

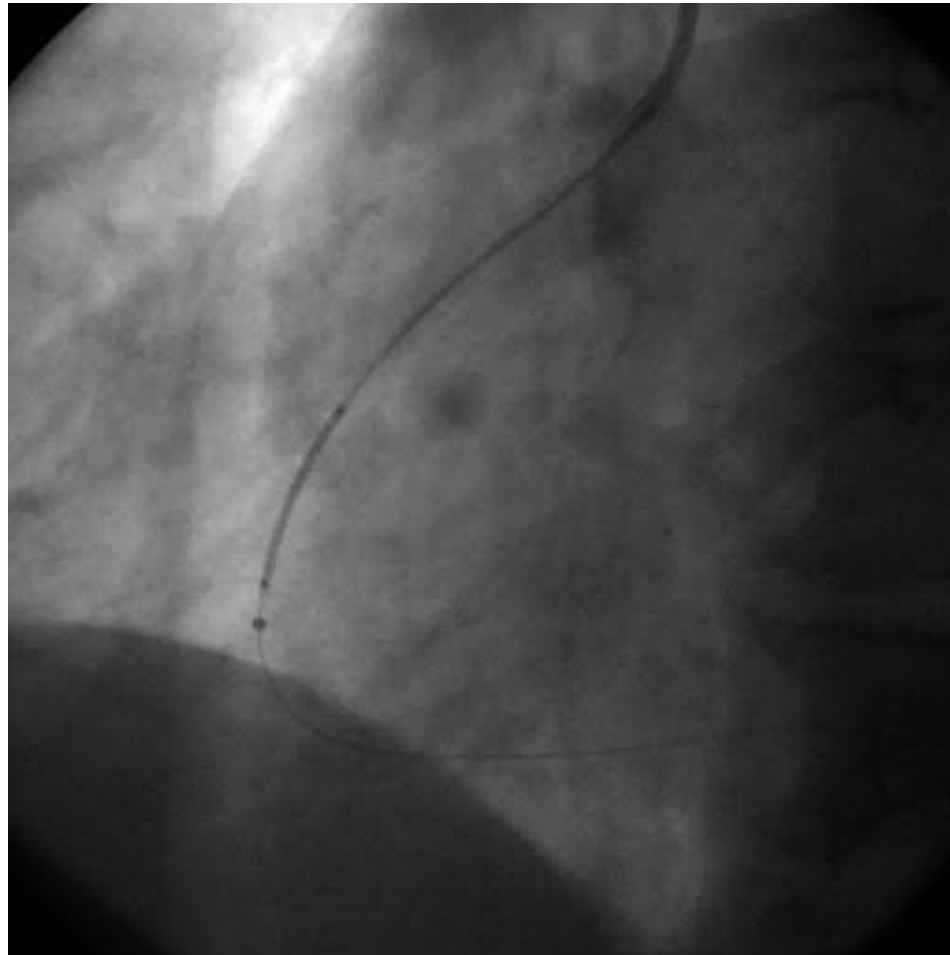


Learning curve with thromboaspiration devices

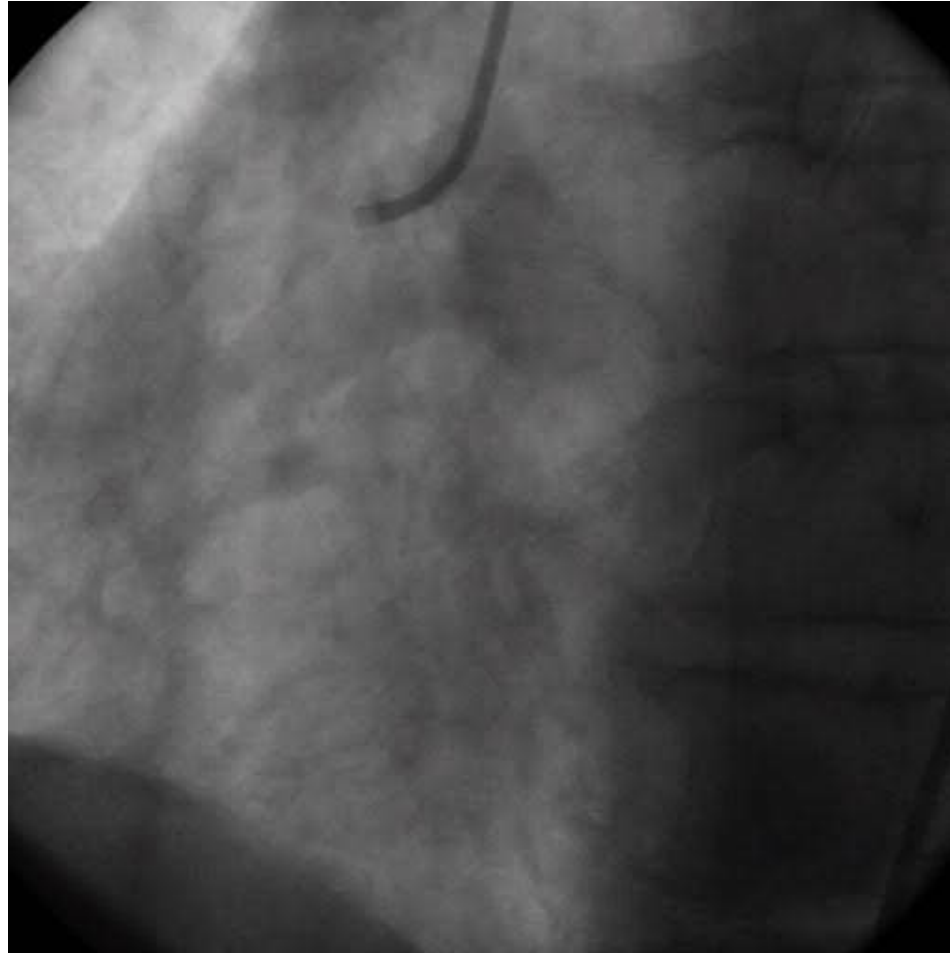
After implantation
of three BMS



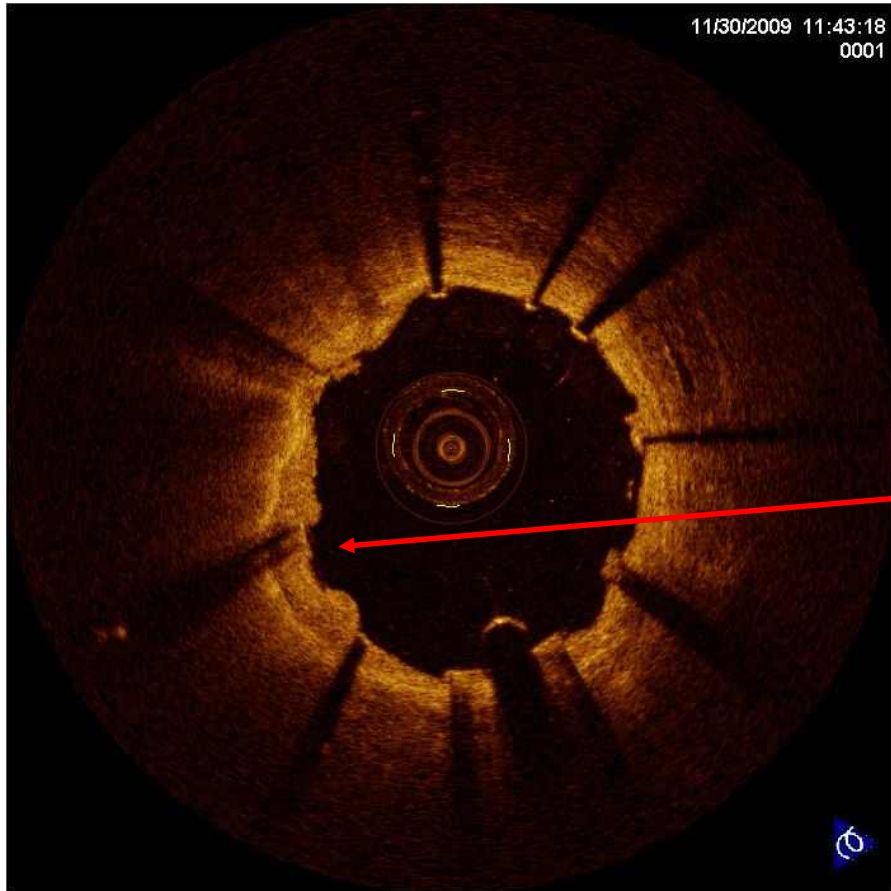
Implantation of a Stentys* self expanding stent after thromboaspiration (2 passages)



Perfect result?



Thromboaspirate several times !!!!



Implantation of a self expanding stent
after two passages of an Export* catheter

Residual Thrombus

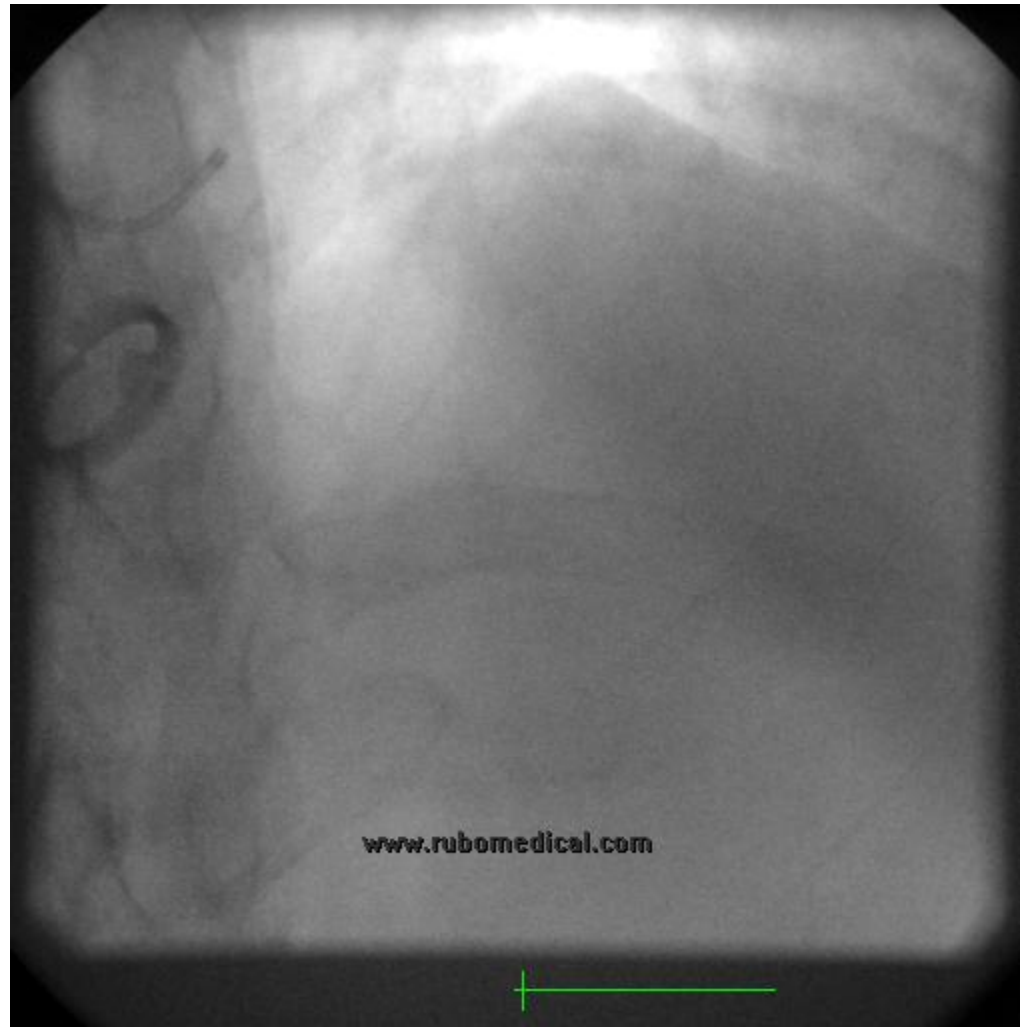
Thromboaspirate several times!!!



OCT three days after

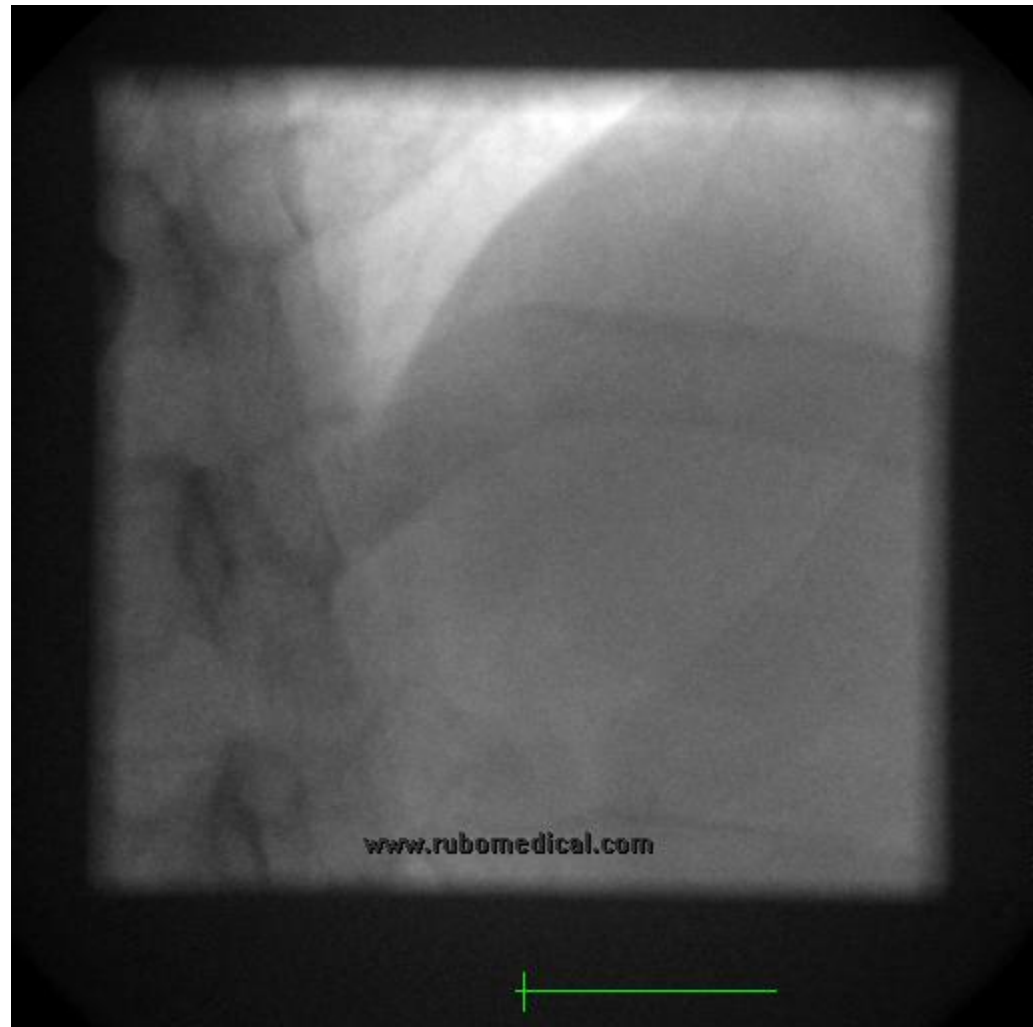
No residual thrombus
Self expanding stent perfectly apposed

When thromboaspiration fails...

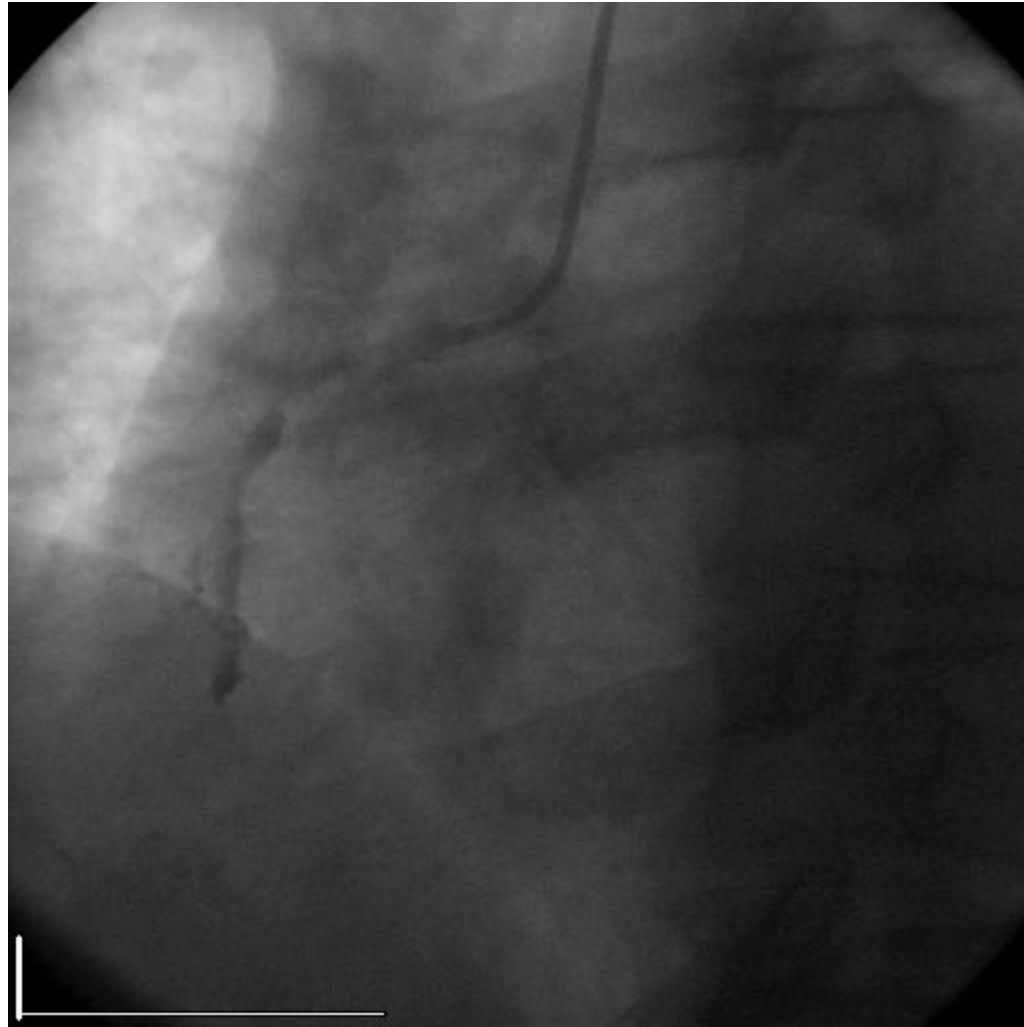


When thromboaspiration fails....

Radial approach
7 French guiding catheter
7 French Export* catheter



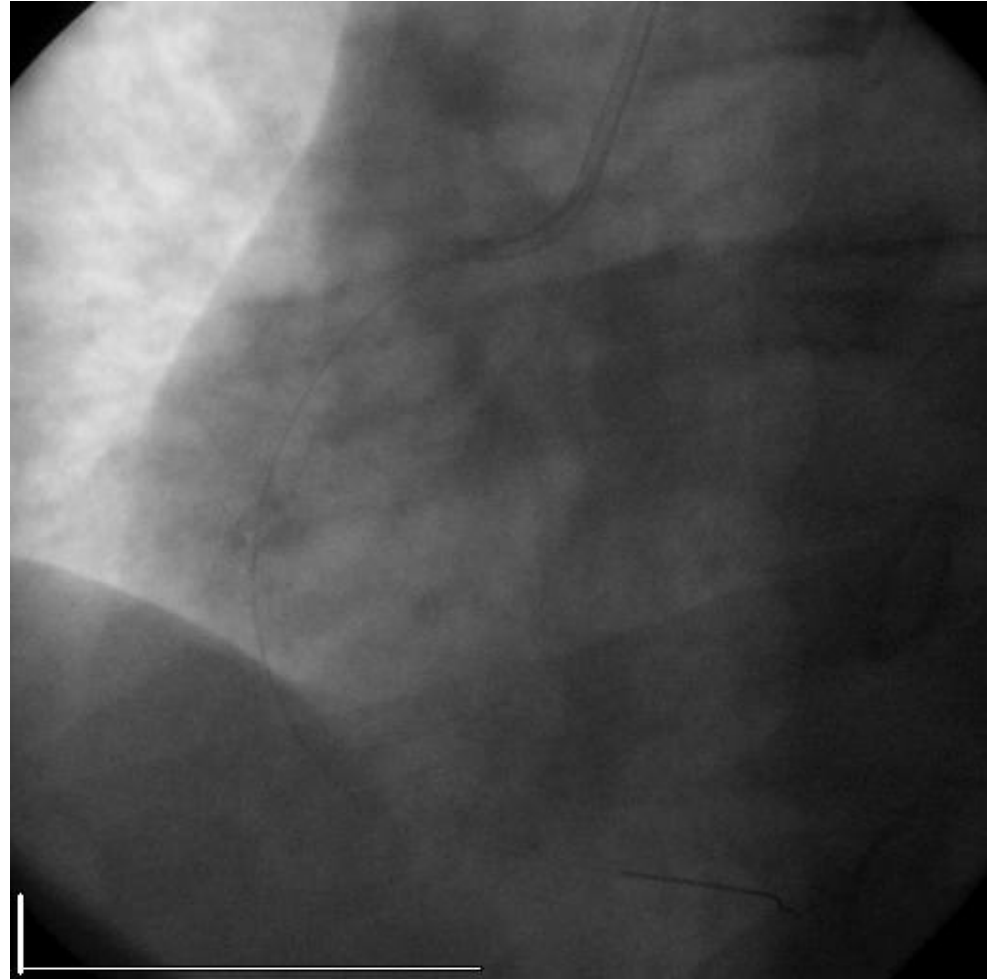
When thromboaspiration fails



When thromboaspiration fails

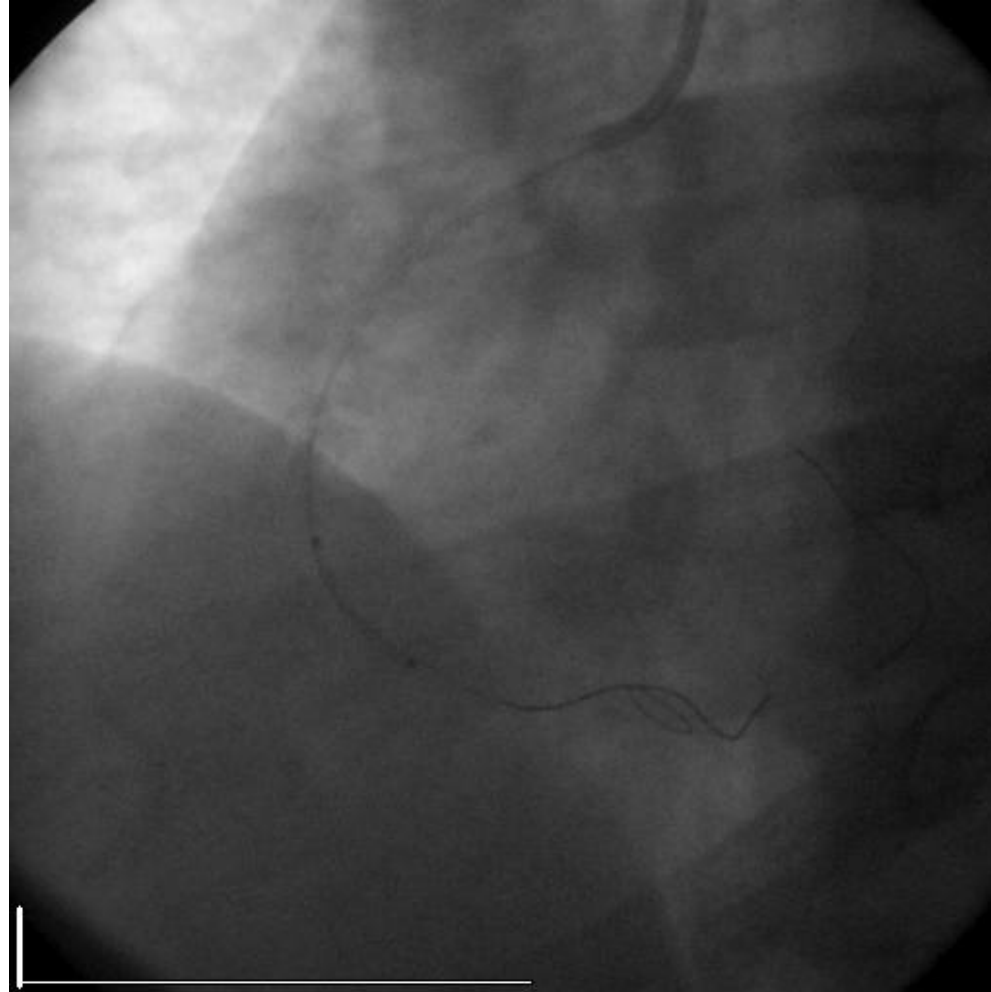
7 French Export*?

Leave it and come back?



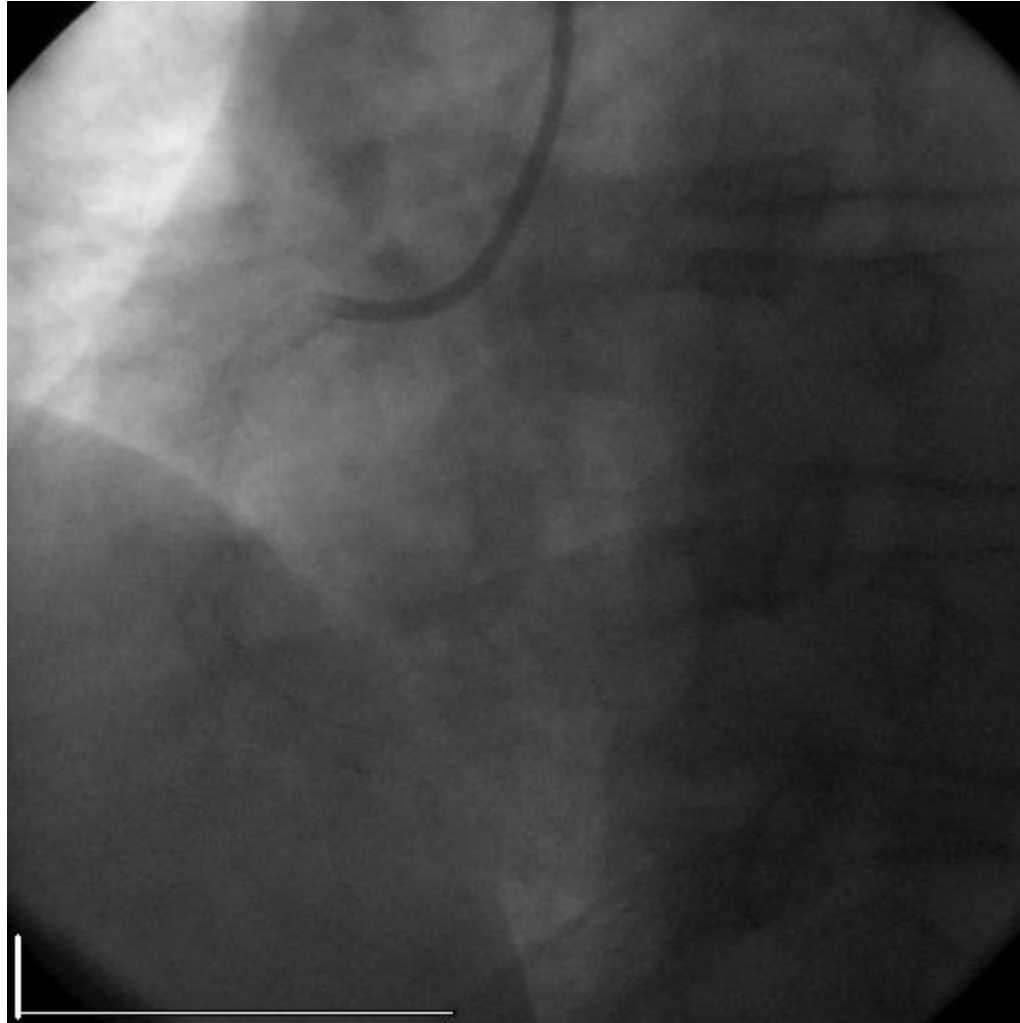
After several passages with Export* 6 French catheter

When thromboaspiration fails.....



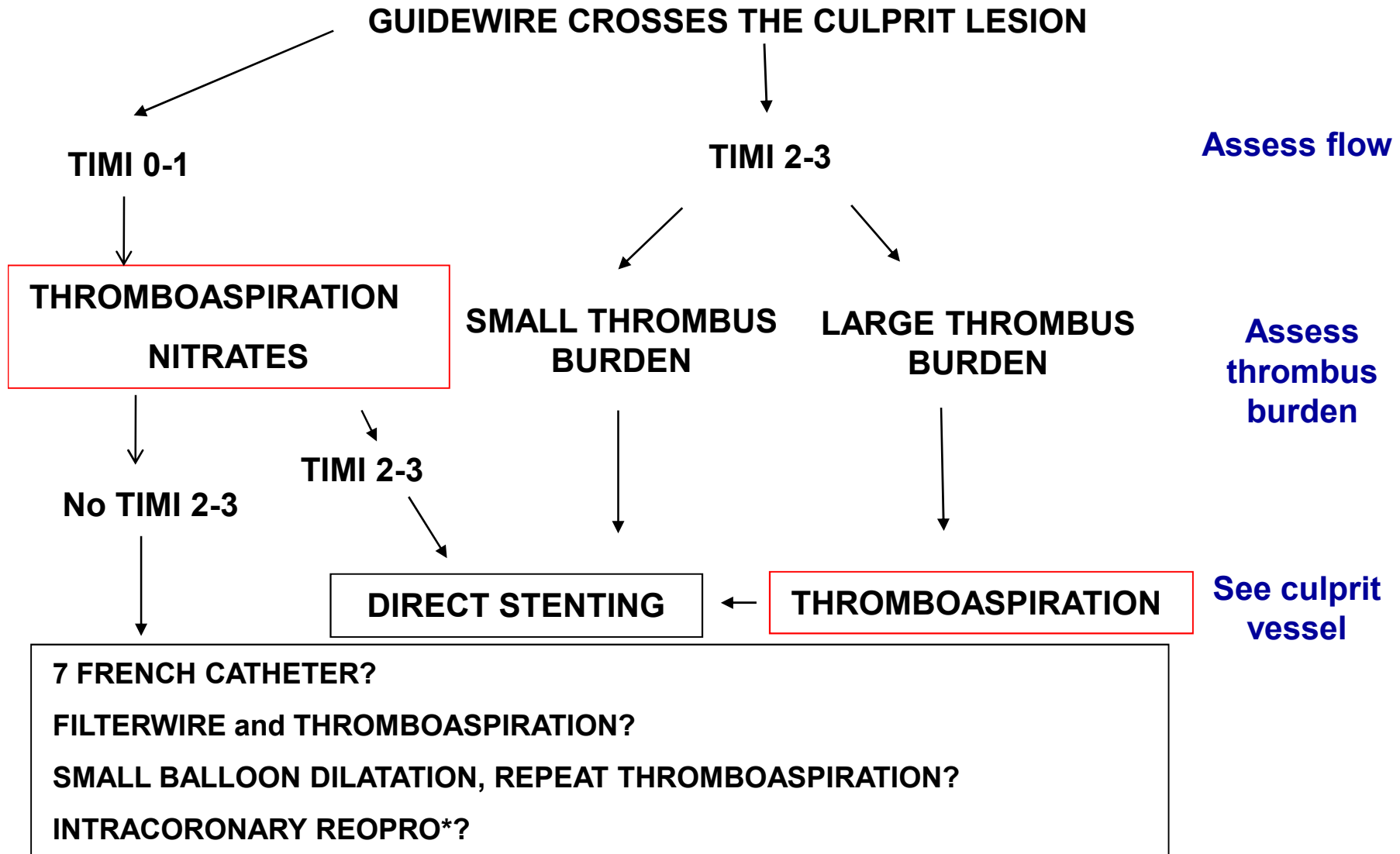
6 French Export* catheter, stents and Filterwire*

When thromboaspiration fails



Final result with three Cypher* stents

Thromboaspiration in Primary PCI



THROMBOASPIRATION : YES !!!

- Thromboaspiration significantly reduced mortality at one year in the TAPAS trial and therefore should be part of routine strategy in primary PCI for AMI
- A learning curve is mandatory and an optimal technique should be used:
 - Avoid kinking the catheter during insertion in the guiding catheter
 - Approach the occlusion slowly
 - Perform several passages
 - Retrieve the catheter with negative pressure
 - Open the Y connector and flush
 - Go back several times

With thromboaspiration, patience is a virtue

