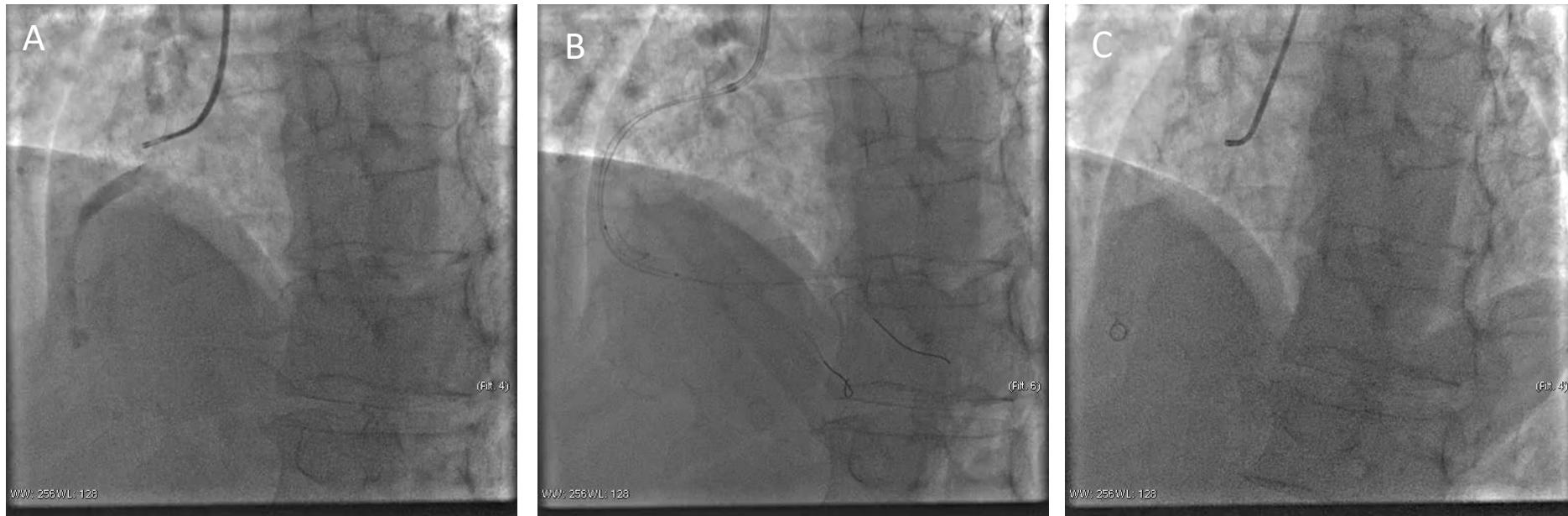




Management of pseudoaneurysm after complex PCI in SCAD

Clinical presentation and index PCI

- 55 years old male, carpenter. Hypertension.
- 20 Aug 2019, 30 minutes after an intense isometric effort, prolonged chest pain
- ECG: infero-postero-lateral STEMI. Urgent Coronary angiography

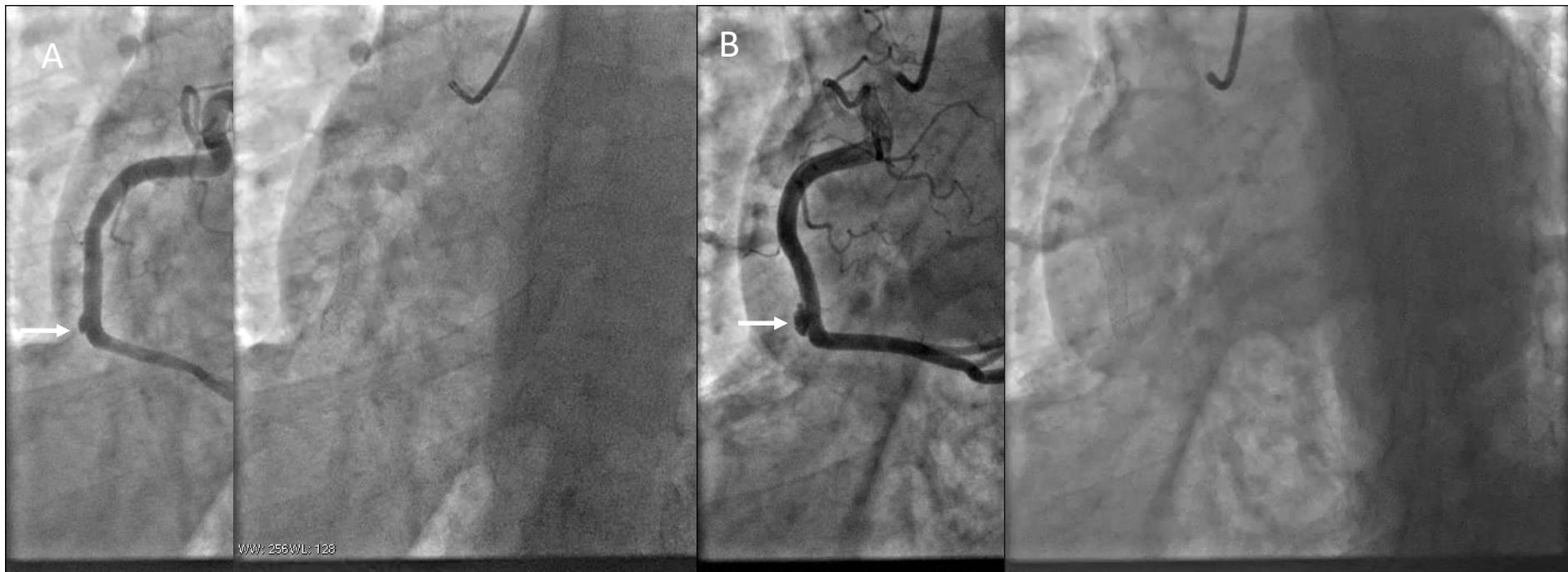


A: Huge RCA dissected at mid-distal portion. Minimum distal flow. Ongoing chest pain and persistent ST elevation in inferior leads.

B: Single stent deployment (4.5 x 26 mm ZES eluting stent, arrow) at dissection entry point, and distal ballooning.

C: Final result

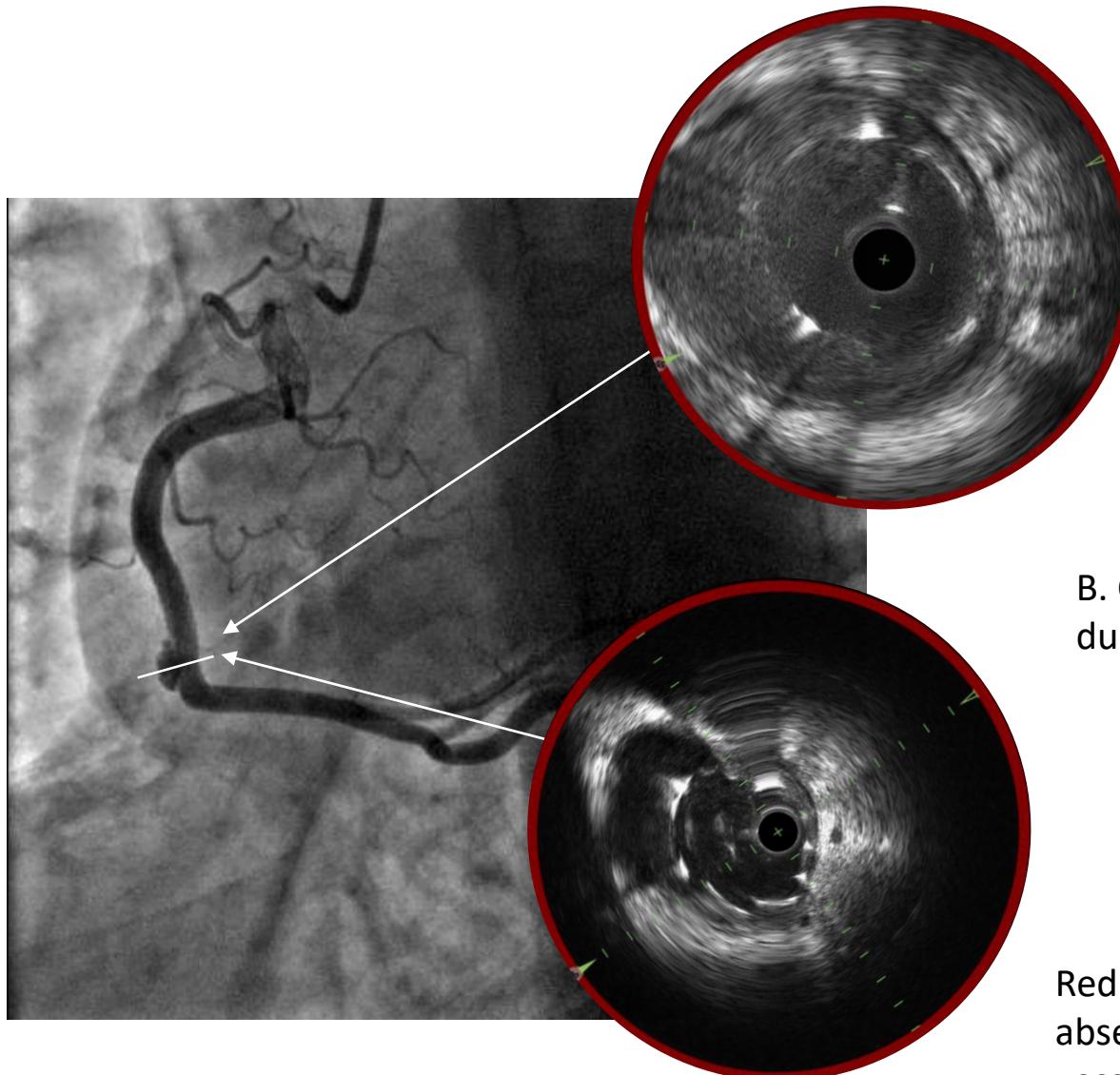
Contrast medium extravasation at the stented segment



A: Pre-discharge angiography, showing an extravasation (arrow) indicating a pseudoaneurism, at the level of SCAD entry point treated with DES.

B: Elective 5 months angiography control, showing increased dimension of extravasation image.

IVUS-NIRS findings



A. Automatic pullback showing huge pseudoaneurysm

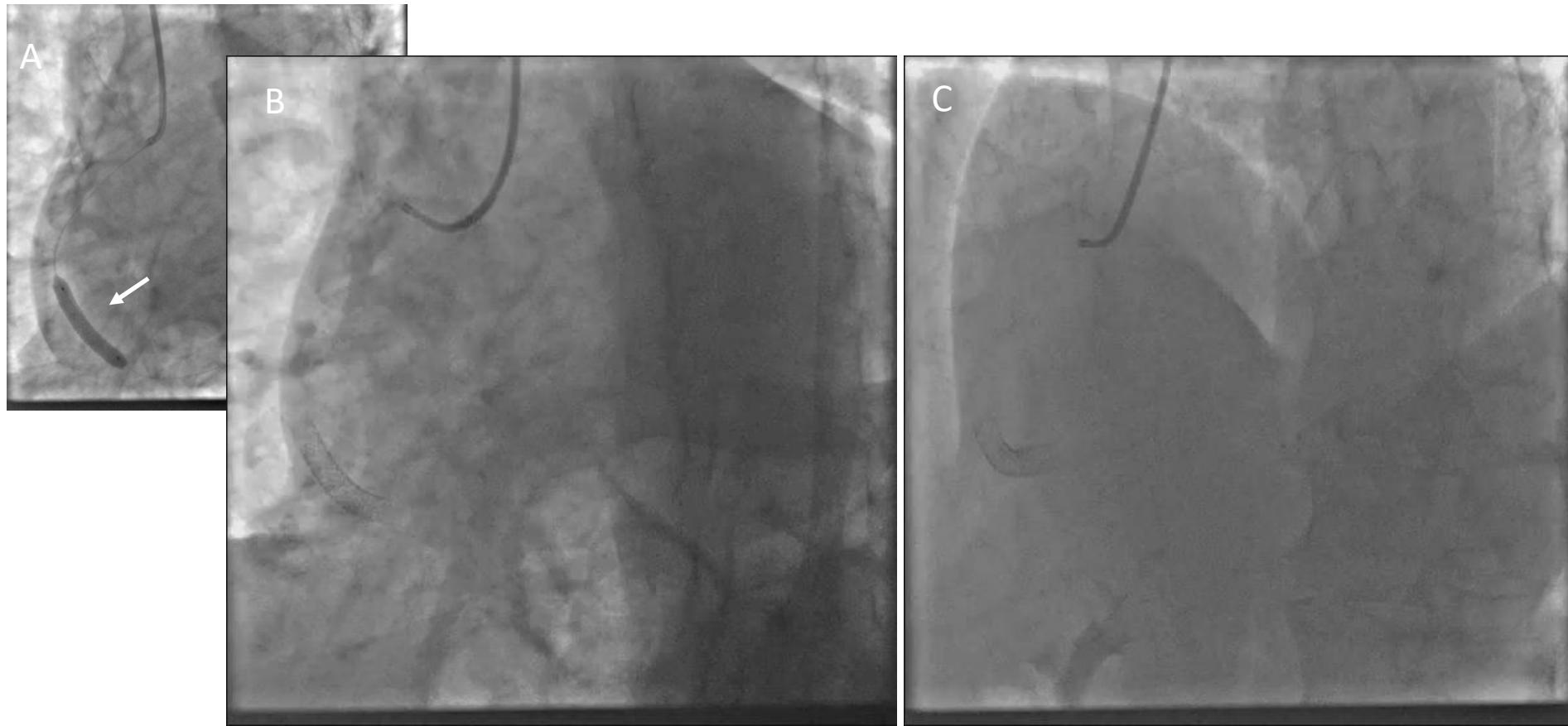
B. Contrast medium injection during manual pullback

Red circles around IVUS frames show absence of lipid components within the vessel wall

What to do now?

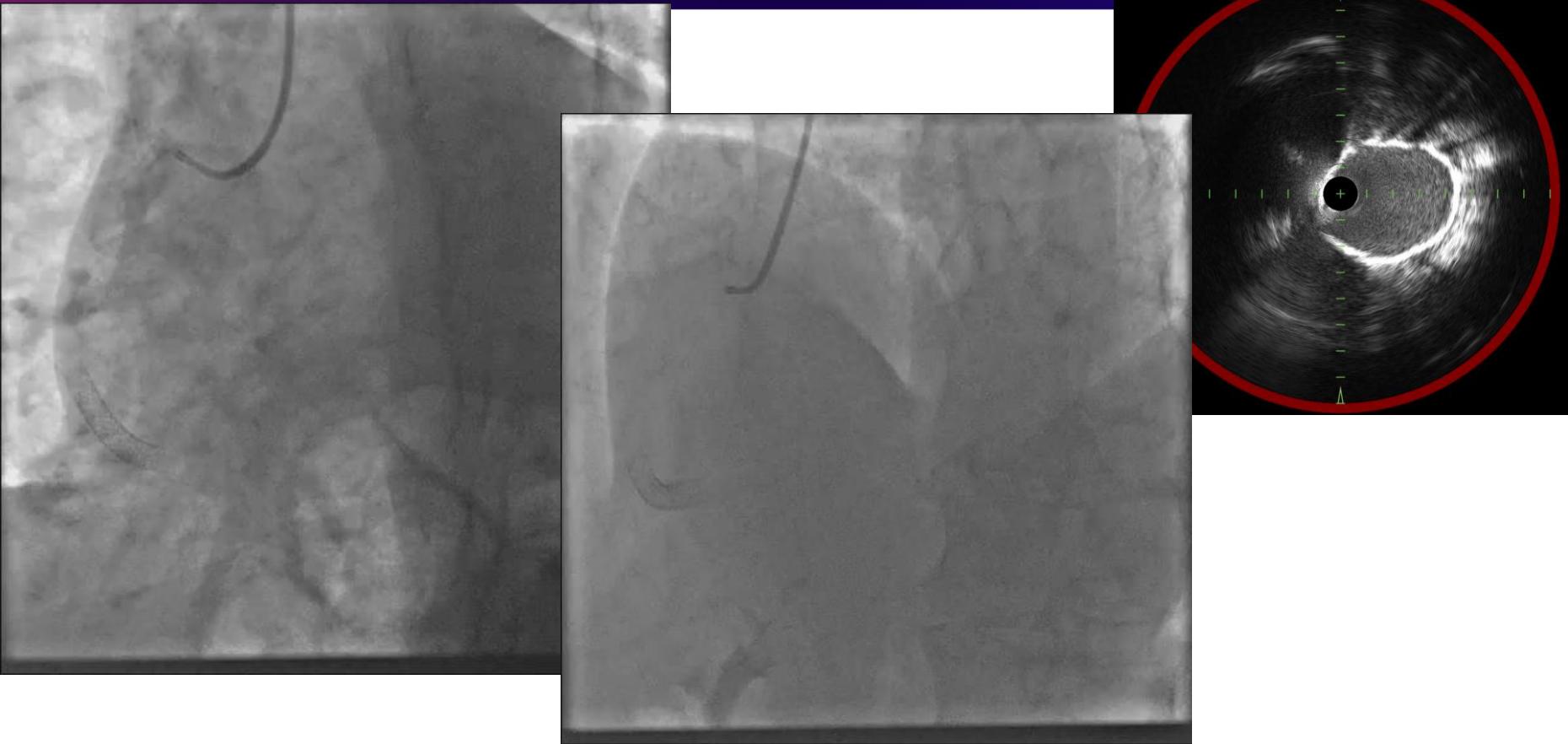
- Wait and repeat angiography and IVUS few months later
- Fix the pseudoaneurism with coils deployment through stent struts
- Cover the lesion with a covered stent

COVERD stent implantation



A: Papirus covered stent 5.0 x 26 mm implantation (arrow). Postdilatation with NC balloon
B-C: final angiographic result with complete sealing of the pseudoaneurism.

Six months follow-up



The patient was uneventful, with normal activity. No chest pain nor dyspnea
A, B: complete sealing of the pseudoaneurism, without any extravasation. Minimal intimal hyperplasia.
C. IVUS-NIRS scan at the covered stent level confirming the preudoaneurism sealing.

Conclusions

- Coronary artery pseudoaneurysm may be a complication of SCAD even if the dissection entry point is treated with stenting.
- Excluding localized dilations of the vessel walls with covered stents, in large vessels, can be an effective and safe technique with optimal mid-term results and may prevent further expansion/rupture of the aneurism