

# **Epicardial Channel Use**

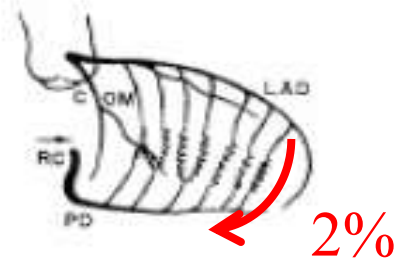
**Toshiya Muramatsu**

**Tokyo General/Kamata Hospital**

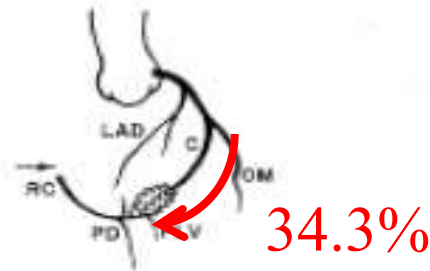
# How to use epicardial channel

- **Channel crossing GW**  
Suoh 03 GW, Sion black GW
- **Epicardial channel variation**  
From Api, Atrial, D1
- **How to cross tortuous channel**  
Sharpening of wire, gentle manipulation
- **How to cross microcatheter**  
Flexible small catheter
- **More safe**  
KWT, Rendezvous

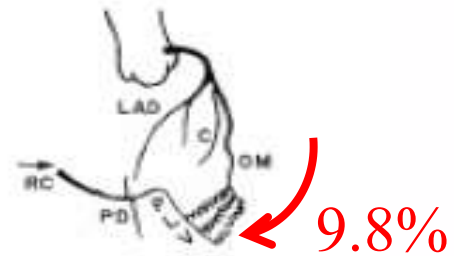
# Epicardial Collateral (RCA)



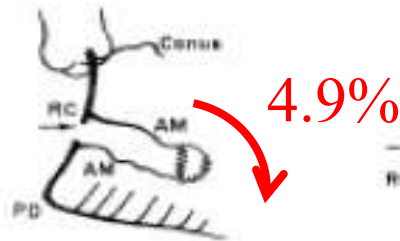
A. RAO-LC Injection (28)



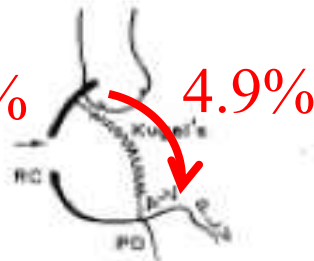
B. LAO-LC Injection (24)



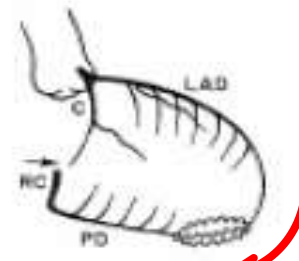
C. LAO-LC Injection (17)



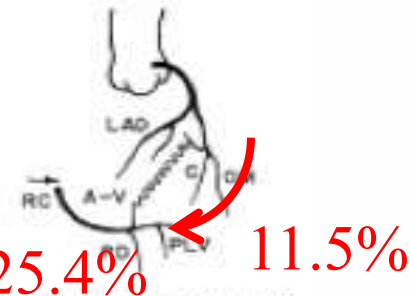
D. RAO-RC Injection (9)



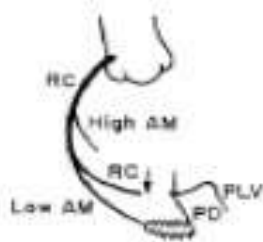
E. LAO-RC Injection (9)



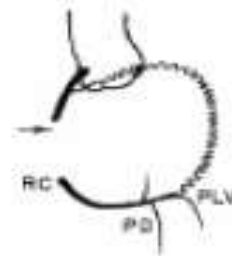
F. RAO-LC Injection (9)



G. LAO-LC Injection (6)



H. LAO-RC Injection (6)

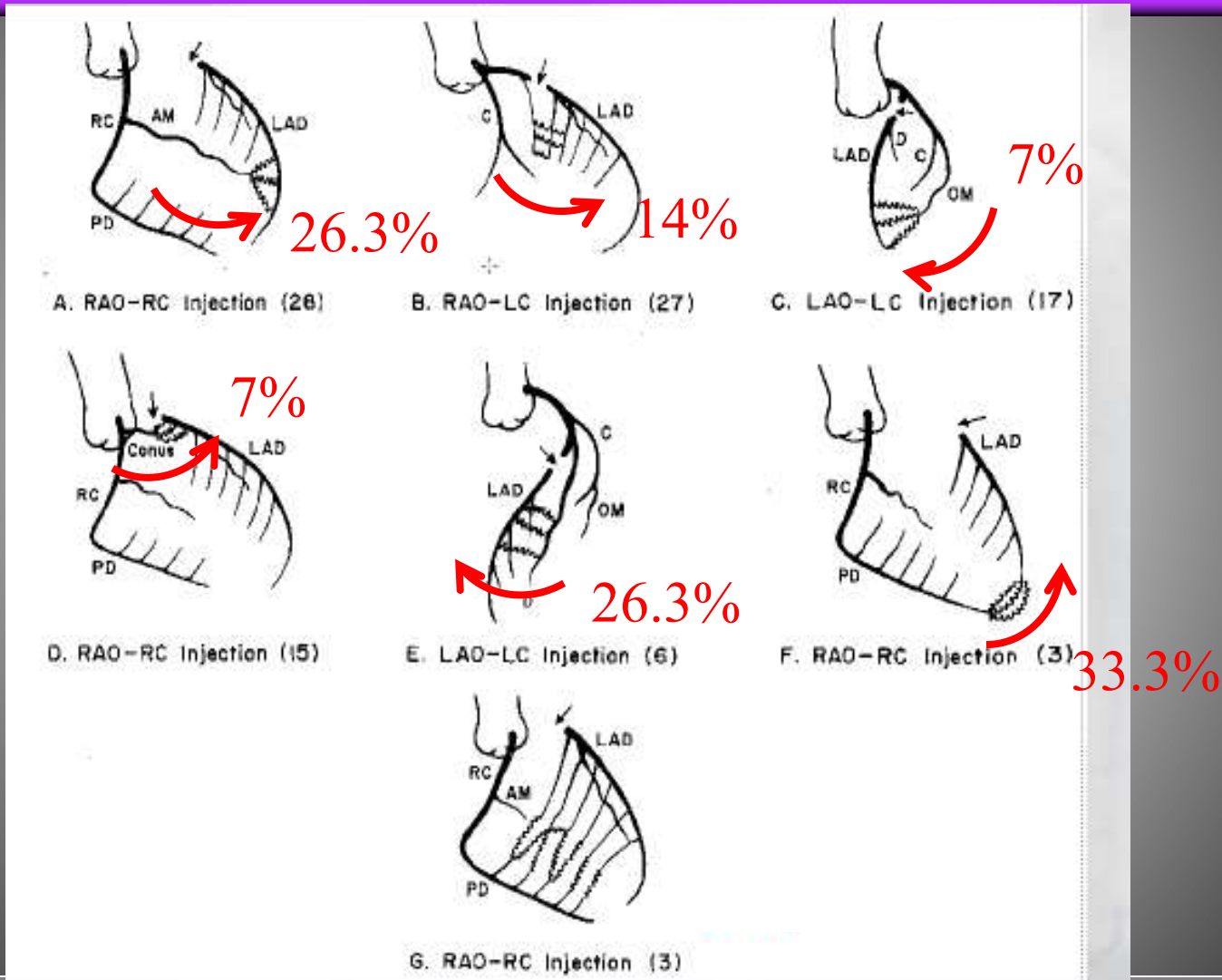


I. LAO-RC Injection (2)



J. LAO-LC Injection (2)

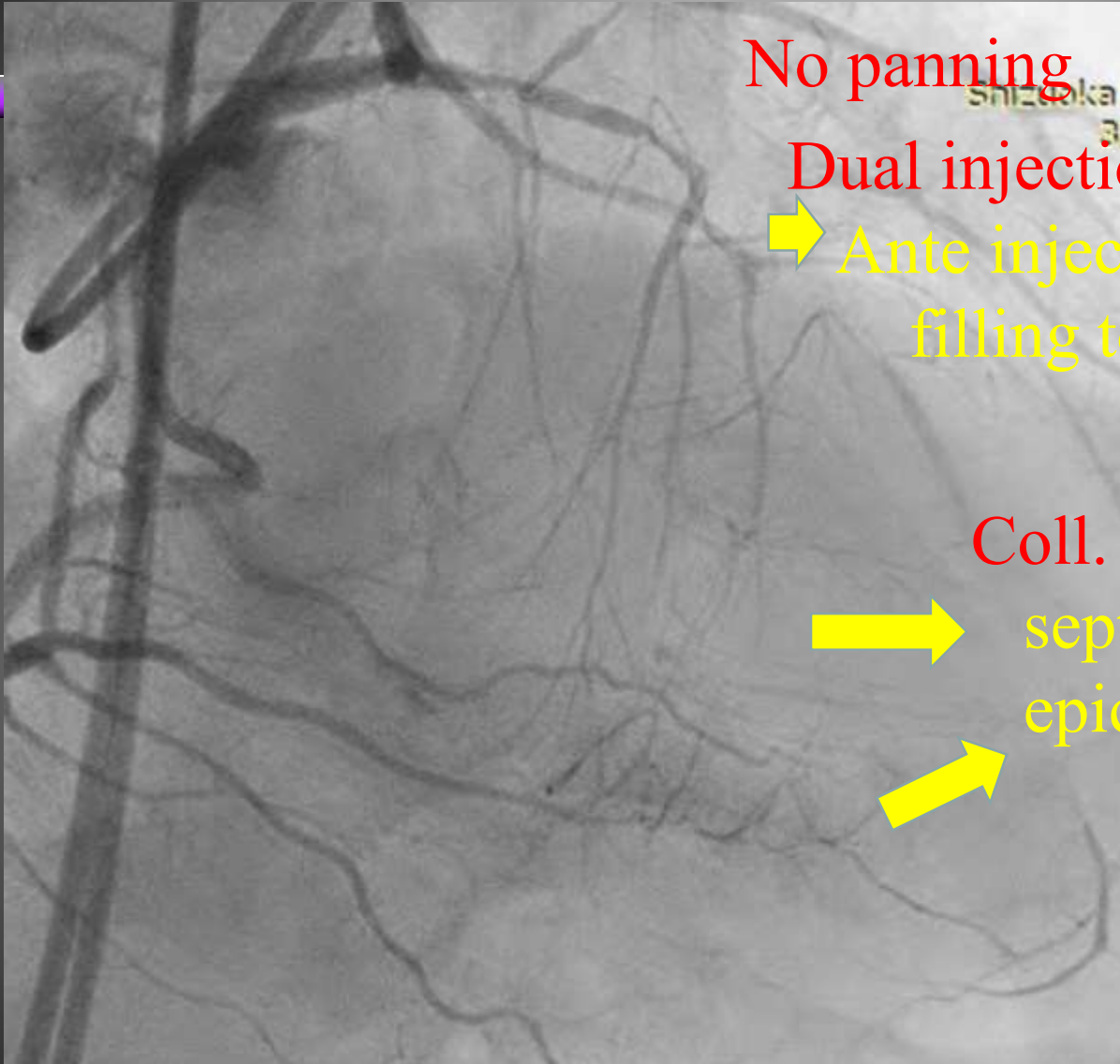
# Epicardial Collateral (LAD)



# Appropriate angiogram



# *Appropriate angiogram*



No panning

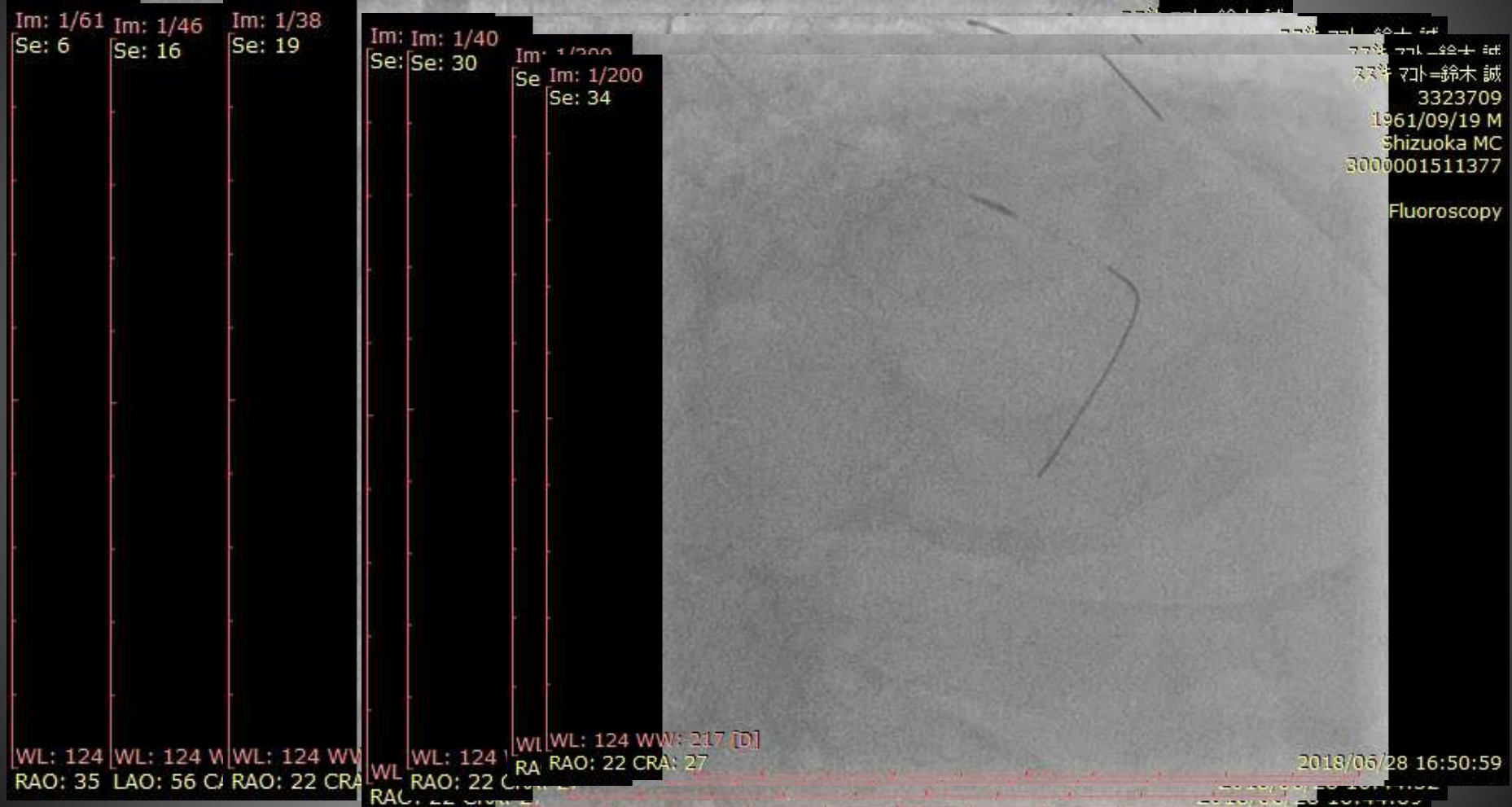
Dual injection

→ Ante injection after collateral filling to distal main vessel

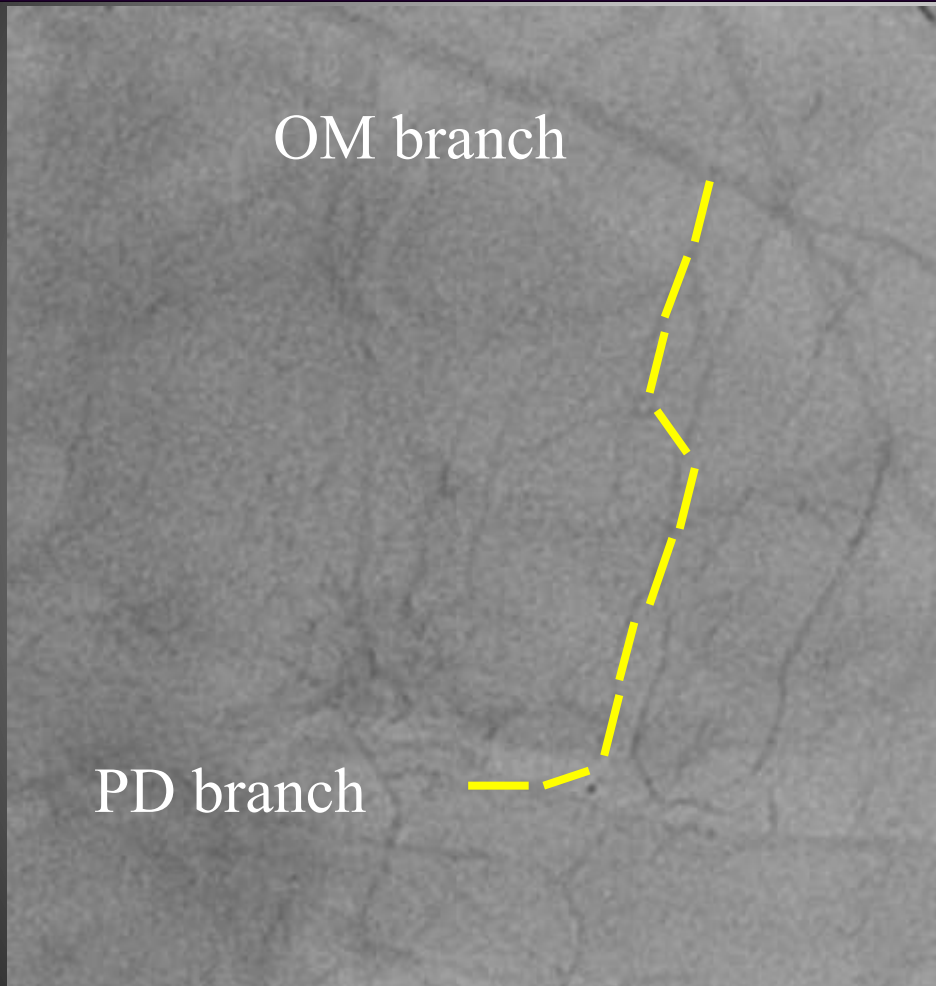
Coll. angiogram

→ septal coll  
epicardial coll

# How to find channel on angiogram



# *How to find channel on angiogram*



Carefull check angio

Retrograde searching channel  
from CTO distal vessel

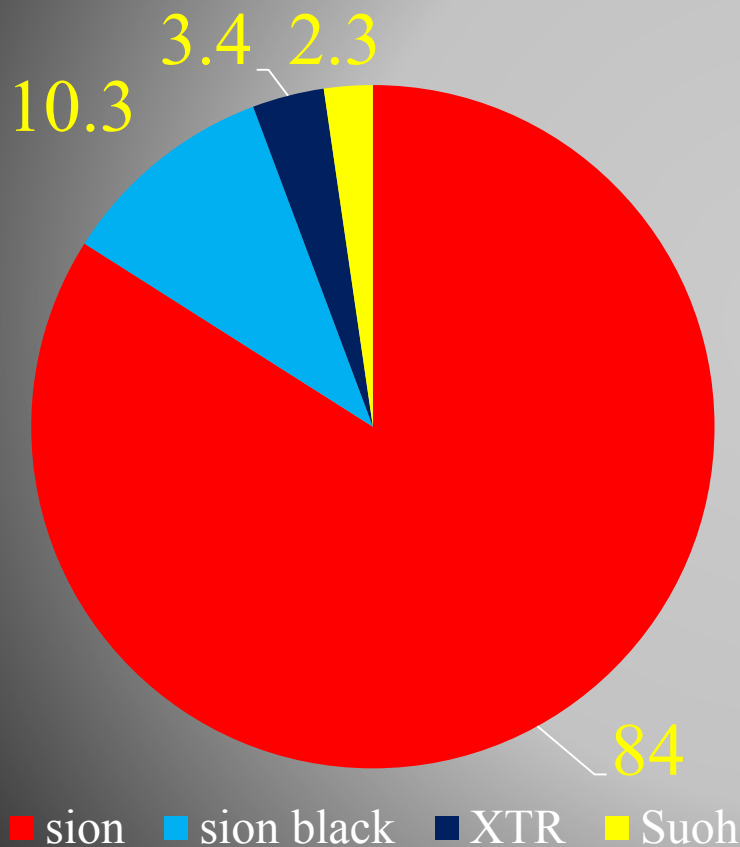
Consider appropriate direction  
to watch epicardial channel

Powerful injection from GC

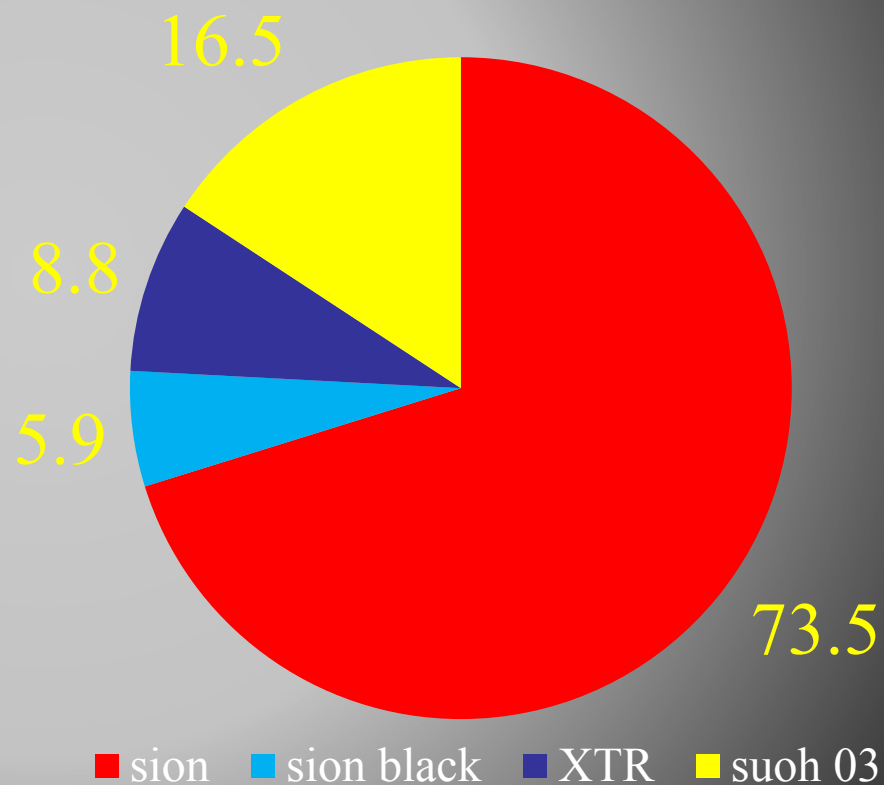


# Types of channel crossing guidewire

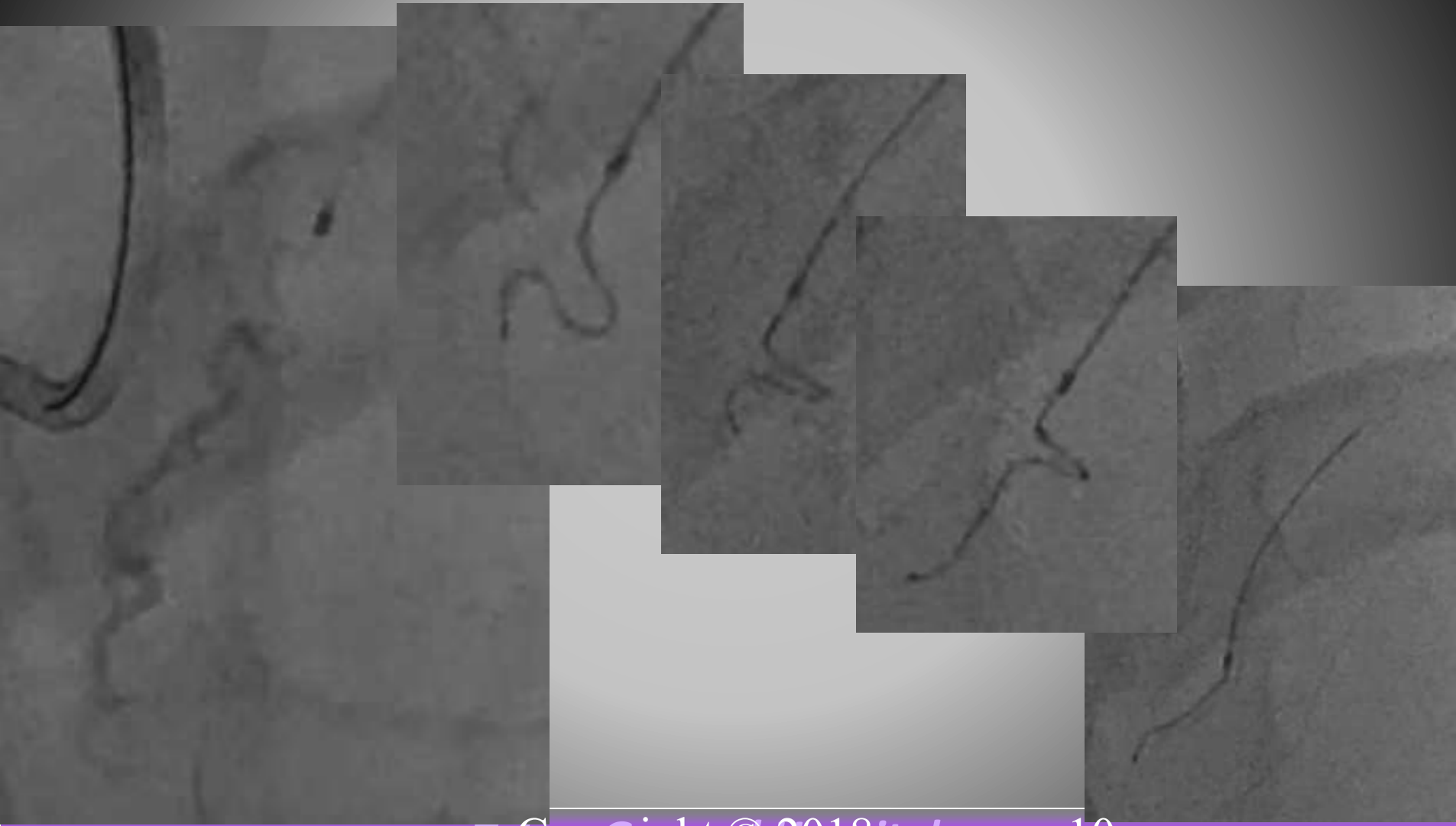
2014 n=102



2015 n=85



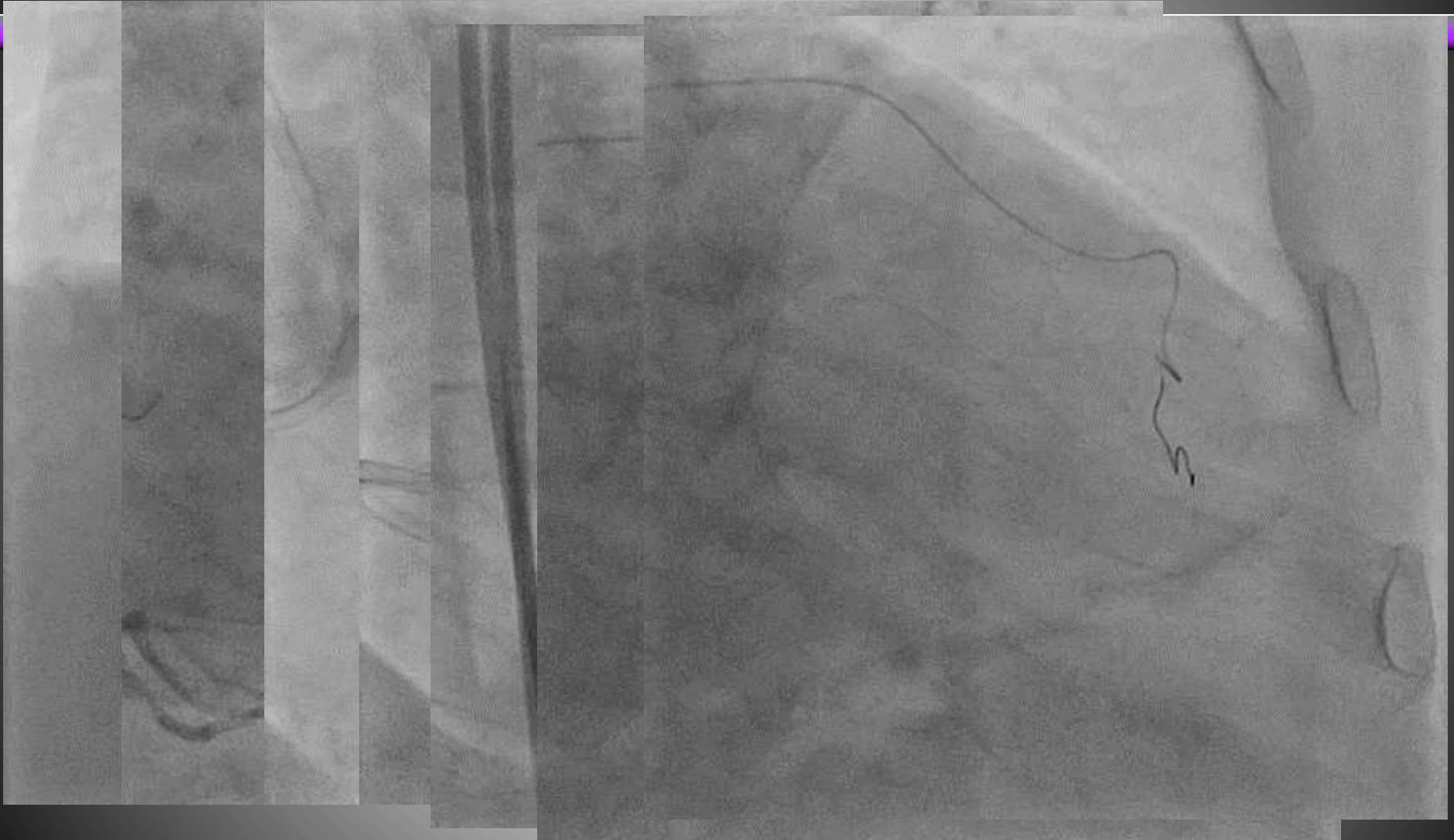
# How to choice epicardial channel



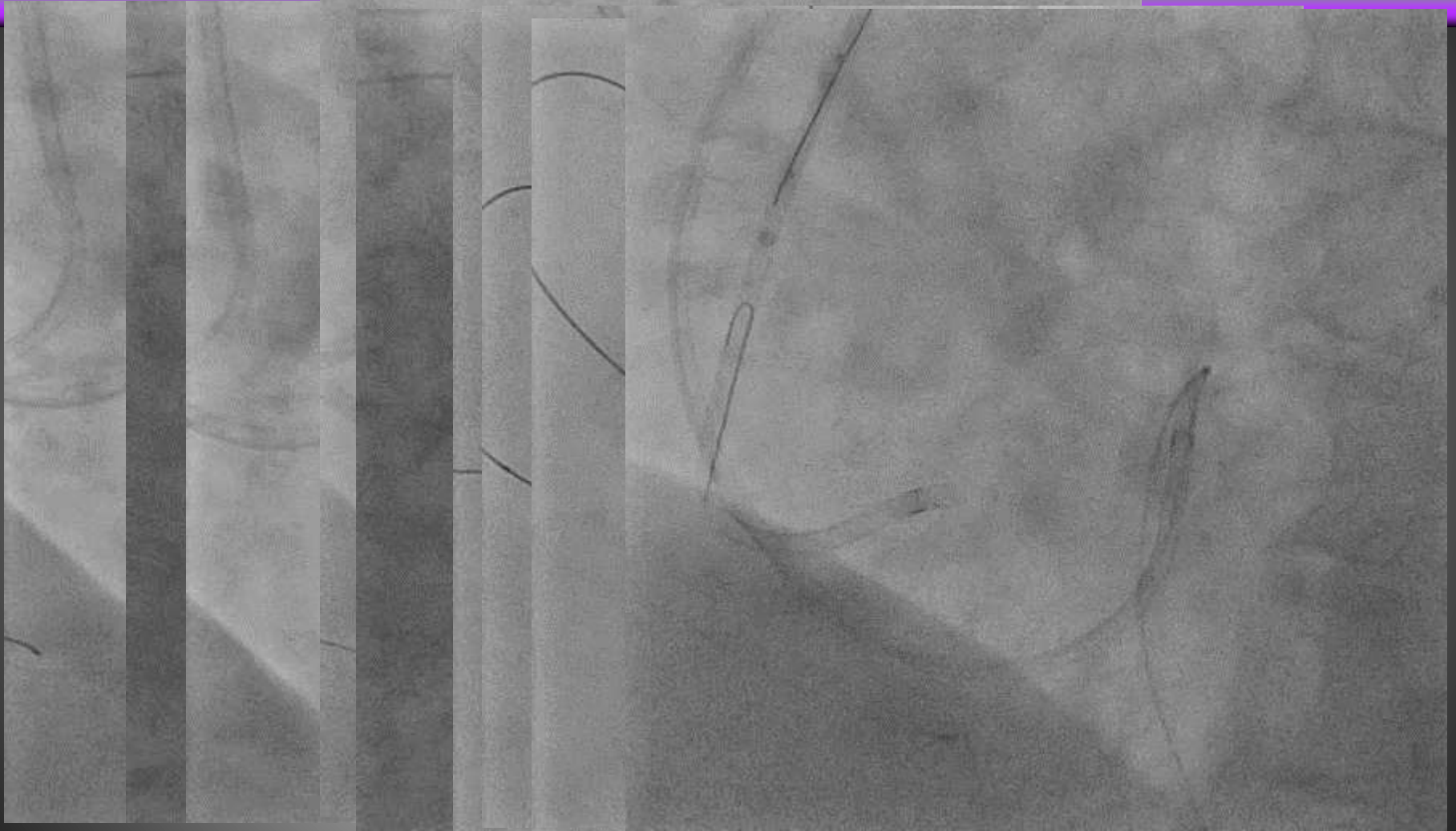
# How to choice epicardial channel



# Case of Suoh 03 GW+Caravell

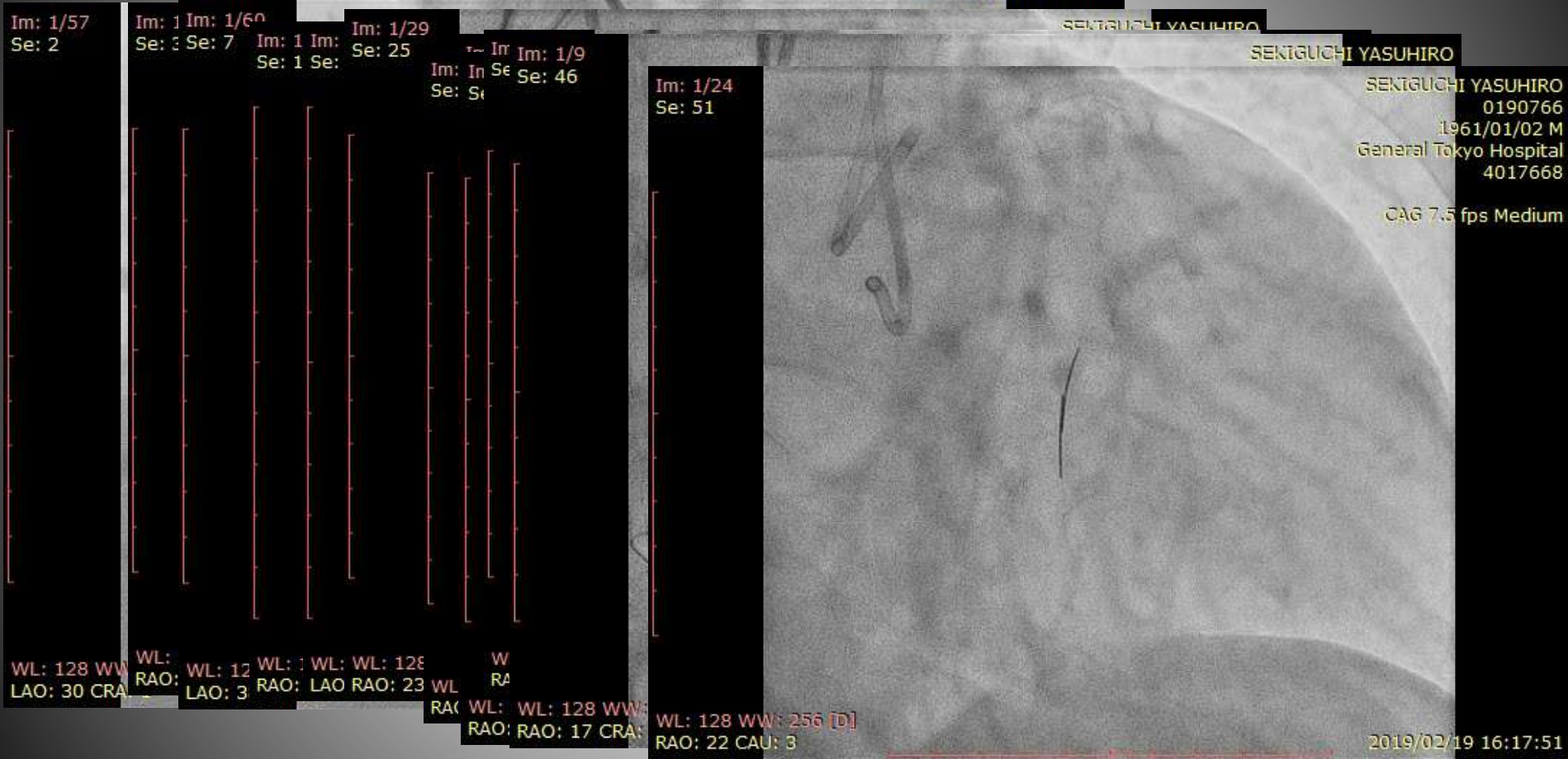


# Case of Suoh 03 GW+Caravell



**Case of successful epicardial crossing  
from atrial channel which produced  
succeeded CX CTO vessel**

# Failed retrograde by septal channel



# Successful PCI for CX CTO

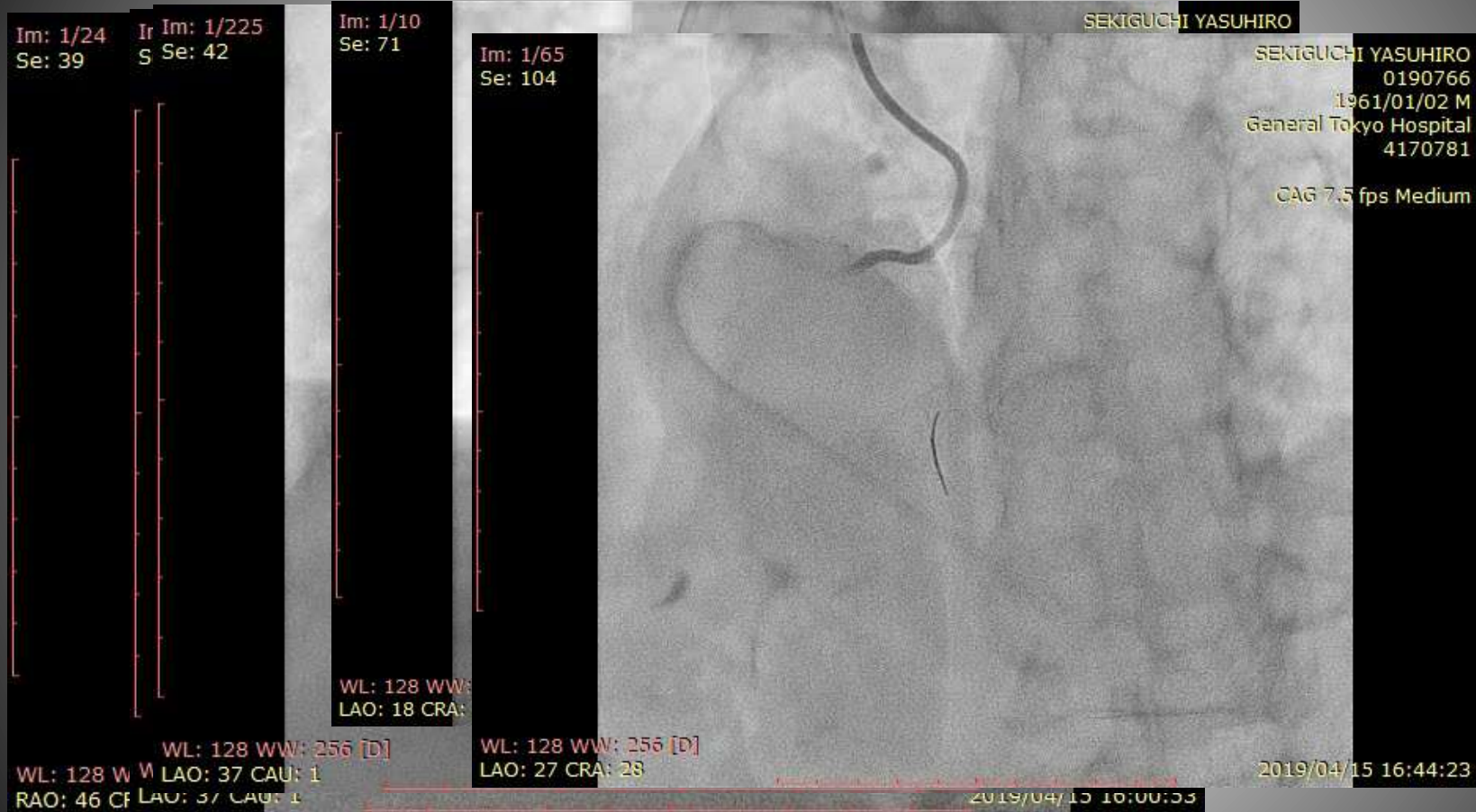




# Failed septal to epicardial CX channel



# Knuckle plus r-CART



# Conclusion

- 1. Recently, retrograde approach of CTO PCI has big impact for failed antegrade approach.**
- 2. Epicardial channel cross is key issue after failed septal channel crossing.**
- 3. Reading epicardial channel is important factor for finding appropriate route.**
- 4. Souh 03, Sion black guidewire is major tool for epicardial channel tracking.**