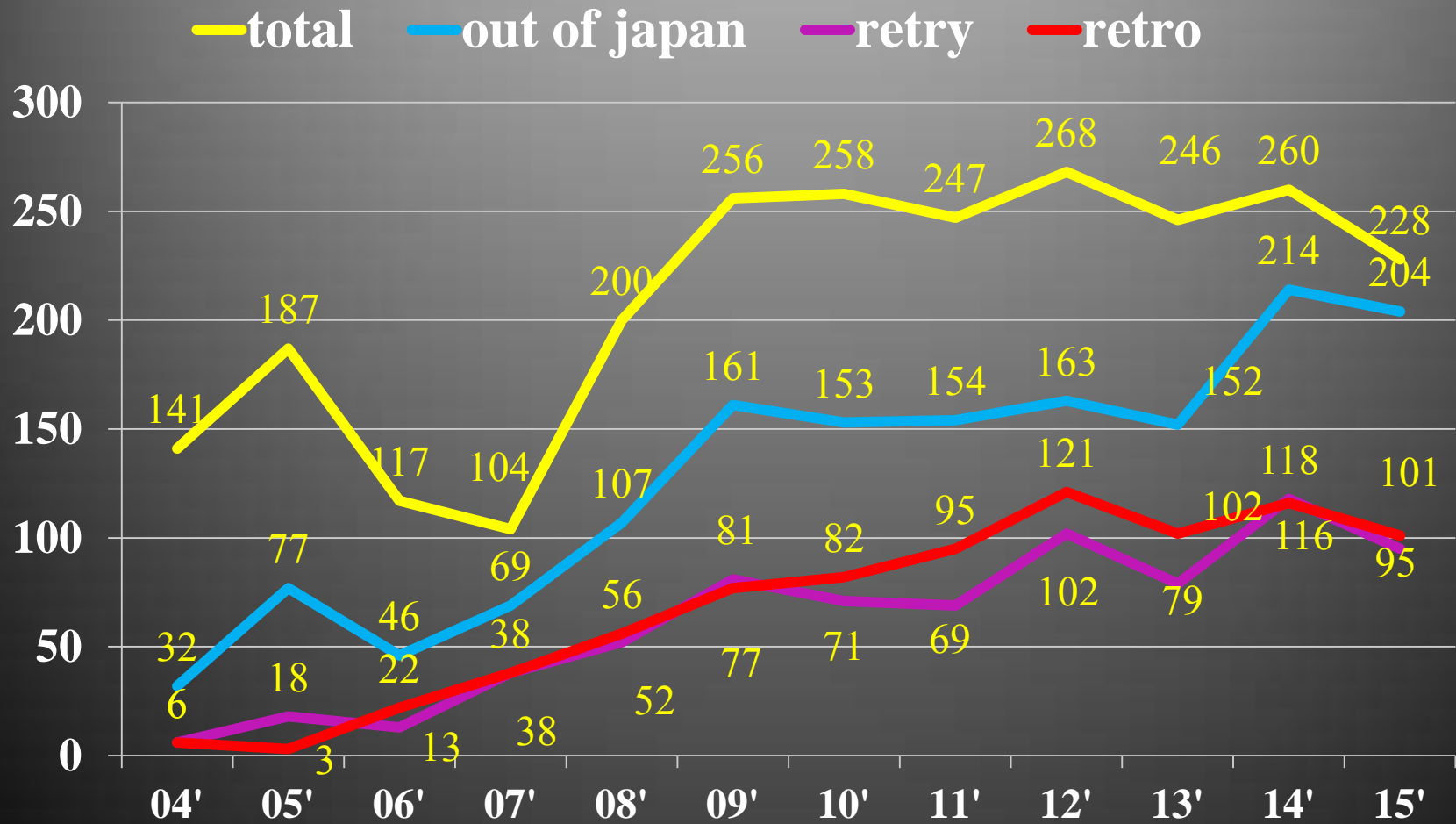

Advanced strategy of Retrograde approach

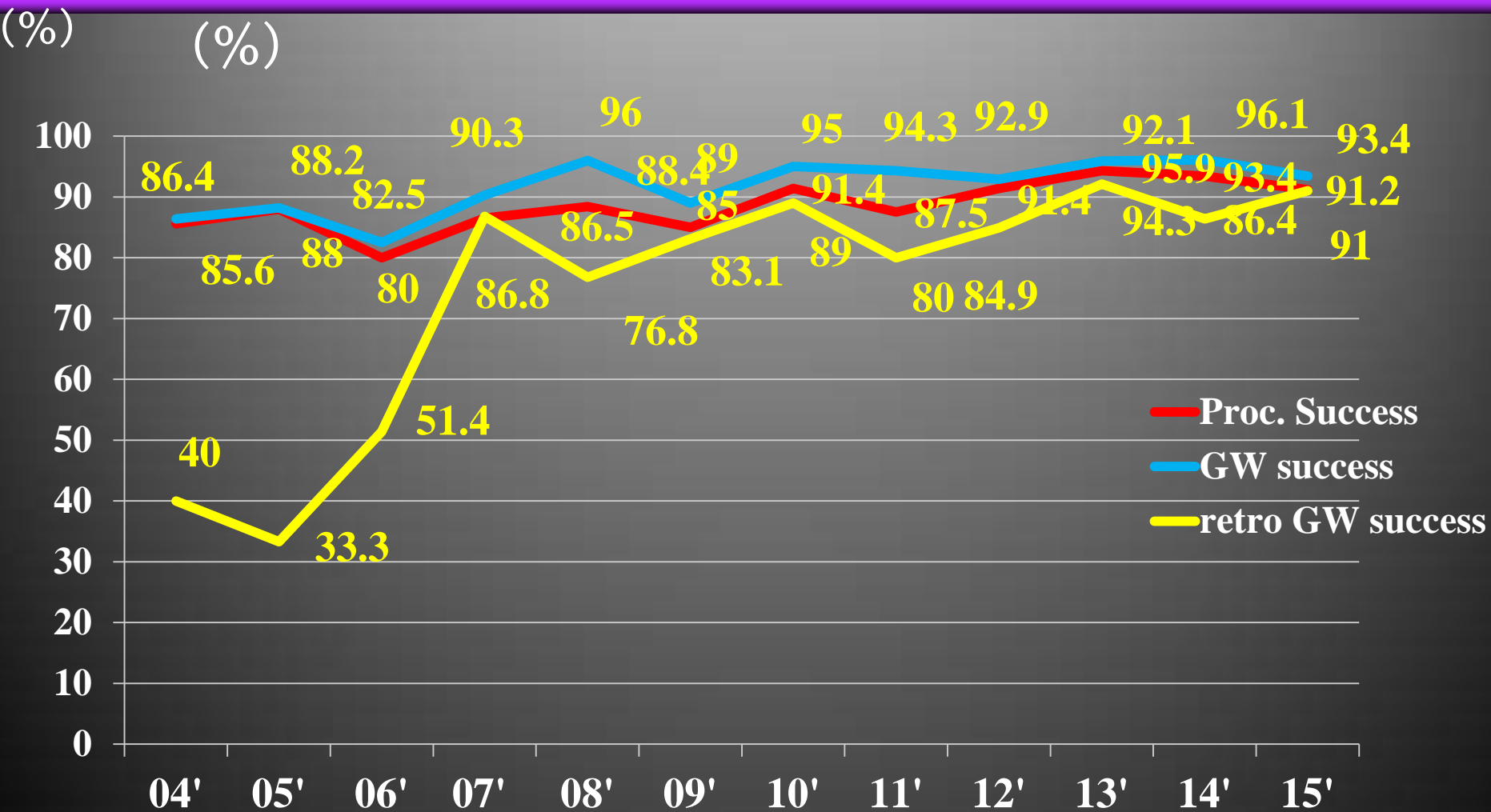
Toshiya Muramatsu

Tokyo General Hospital

Number of CTO lesion



Success rate and retrograde approach for CTO



Recent changes of retrograde approach

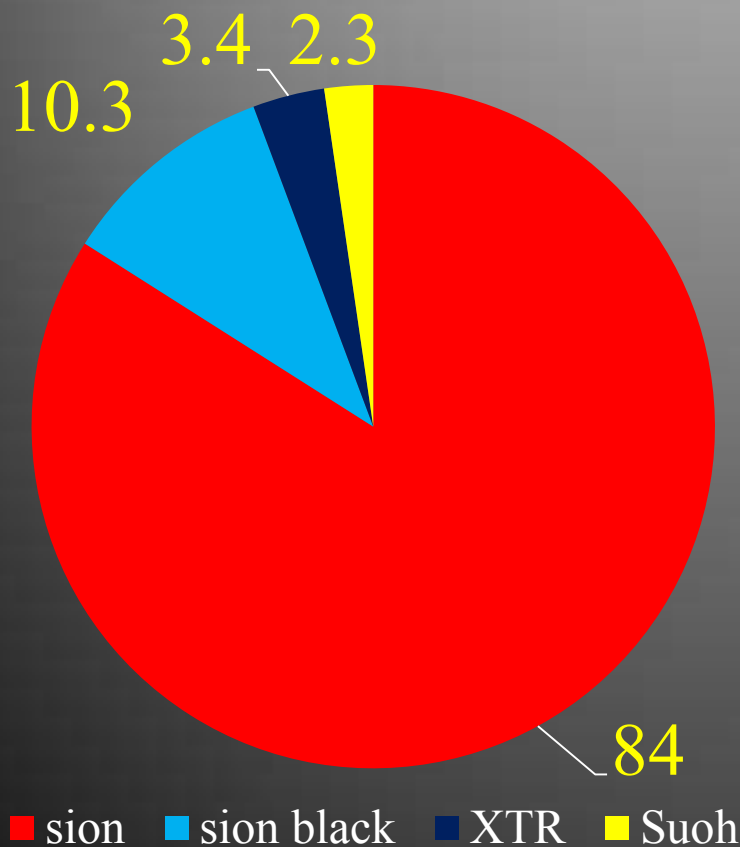
- **Channel crossing GW**
Suoh 03 GW, Sion black GW
- **More epicardial channel**
How cross tortuous channel
- **How to cross retrogradely**
Knuckle wire technique
- **Time saving procedure**
Short antegrade preparation
- **Less invasive**
Use of Glide sheath

Recent changes of retrograde approach

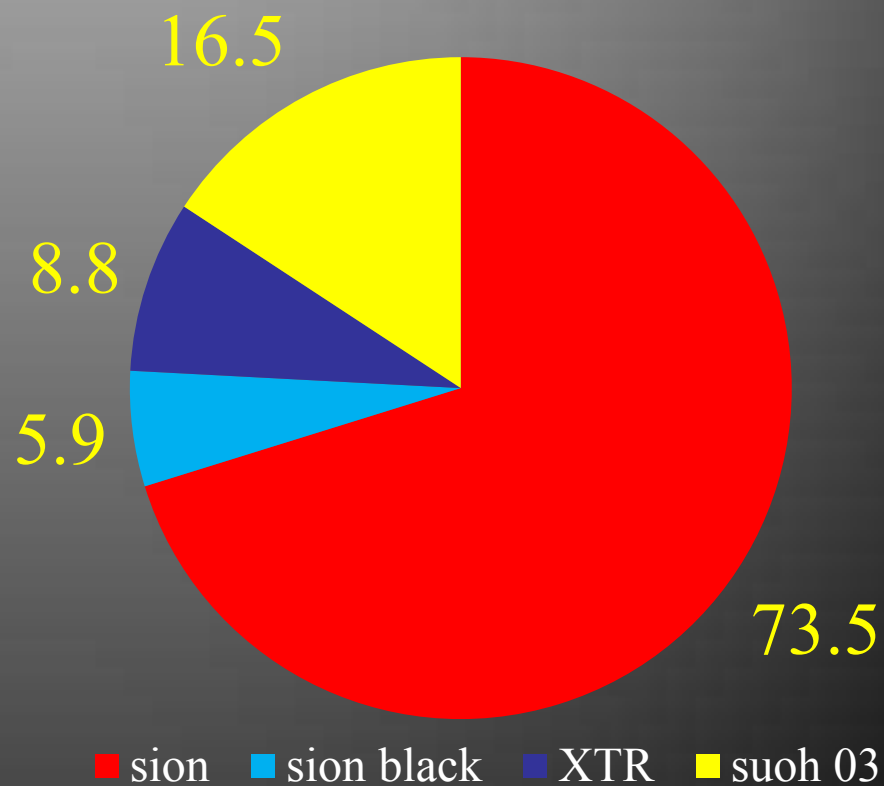
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Types of channel crossing guidewire

2014 n=102



2015 n=85



New Suoh 03 GW

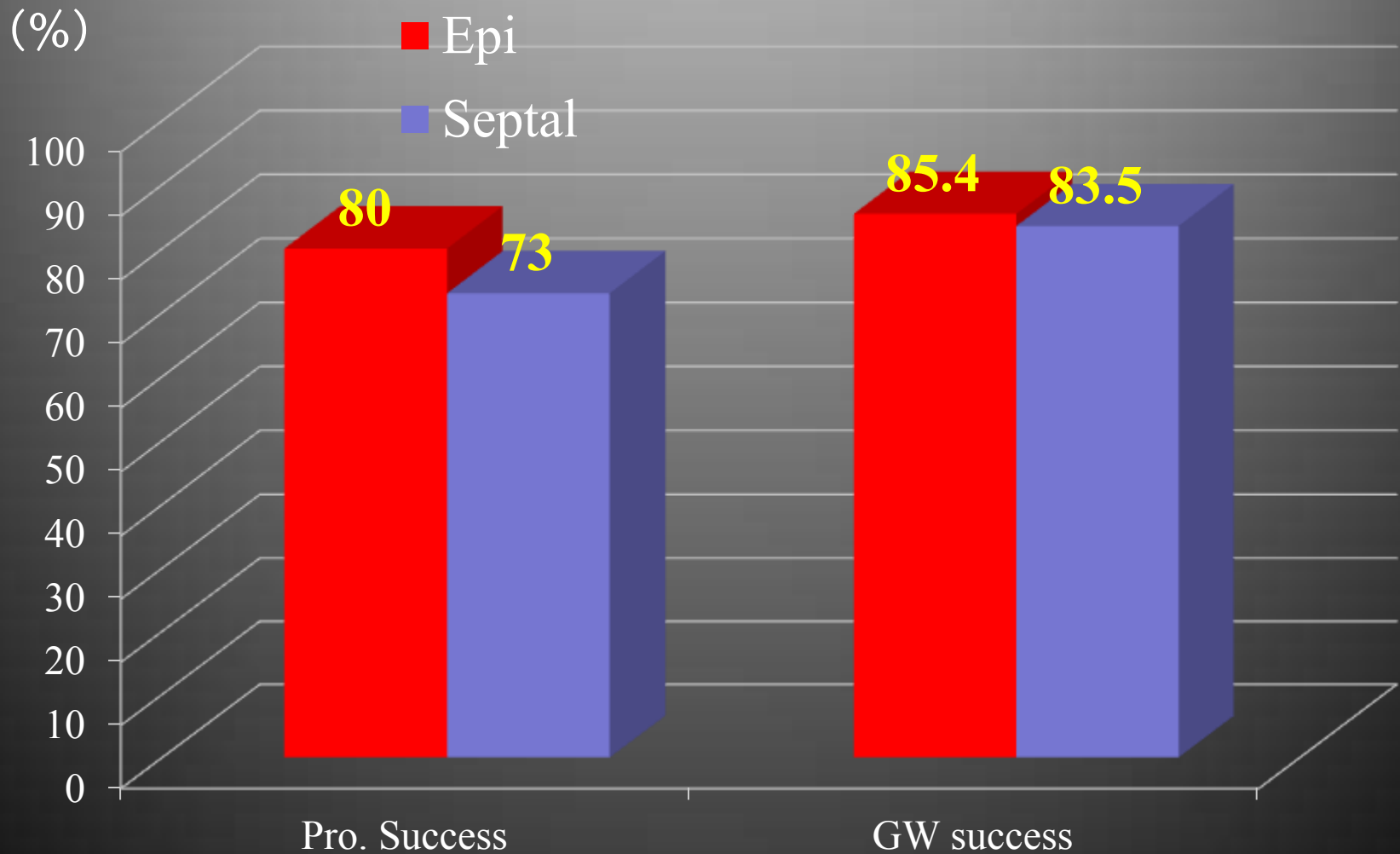


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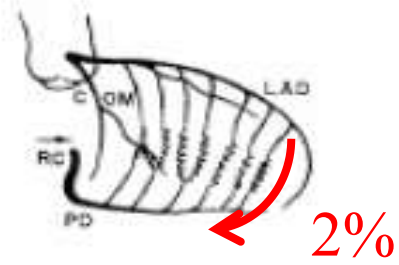
Recent changes of retrograde approach

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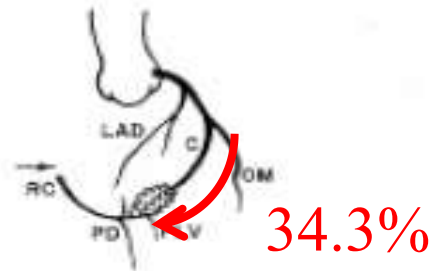
Comparison of success rate with septal and epicardial channel



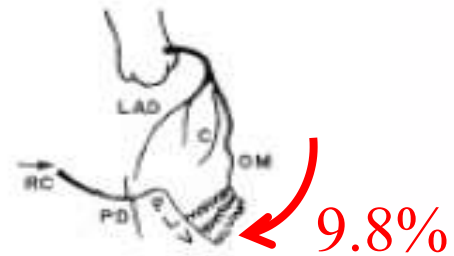
Epicardial Collateral (RCA)



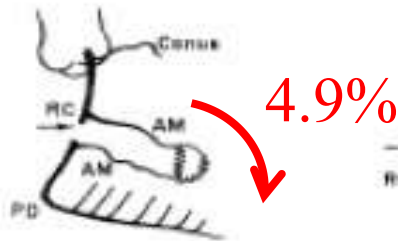
A. RAO-LC Injection (28)



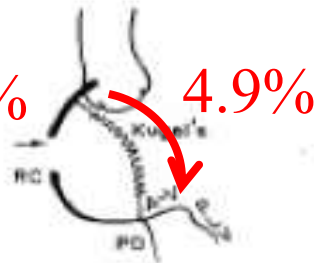
B. LAO-LC Injection (24)



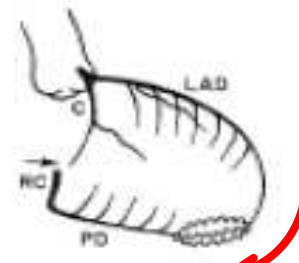
C. LAO-LC Injection (17)



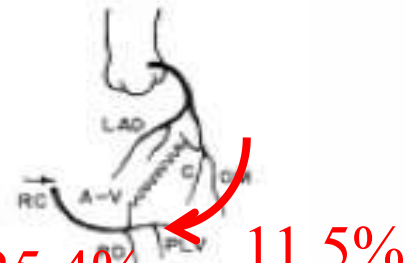
D. RAO-RC Injection (9)



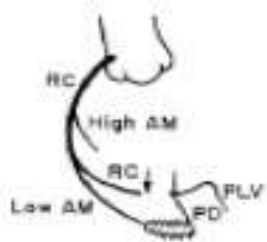
E. LAO-RC Injection (9)



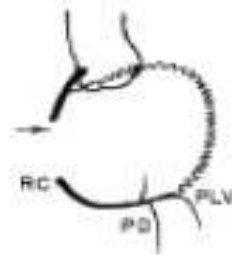
F. RAO-LC Injection (9)



G. LAO-LC Injection (6)



H. LAO-RC Injection (6)

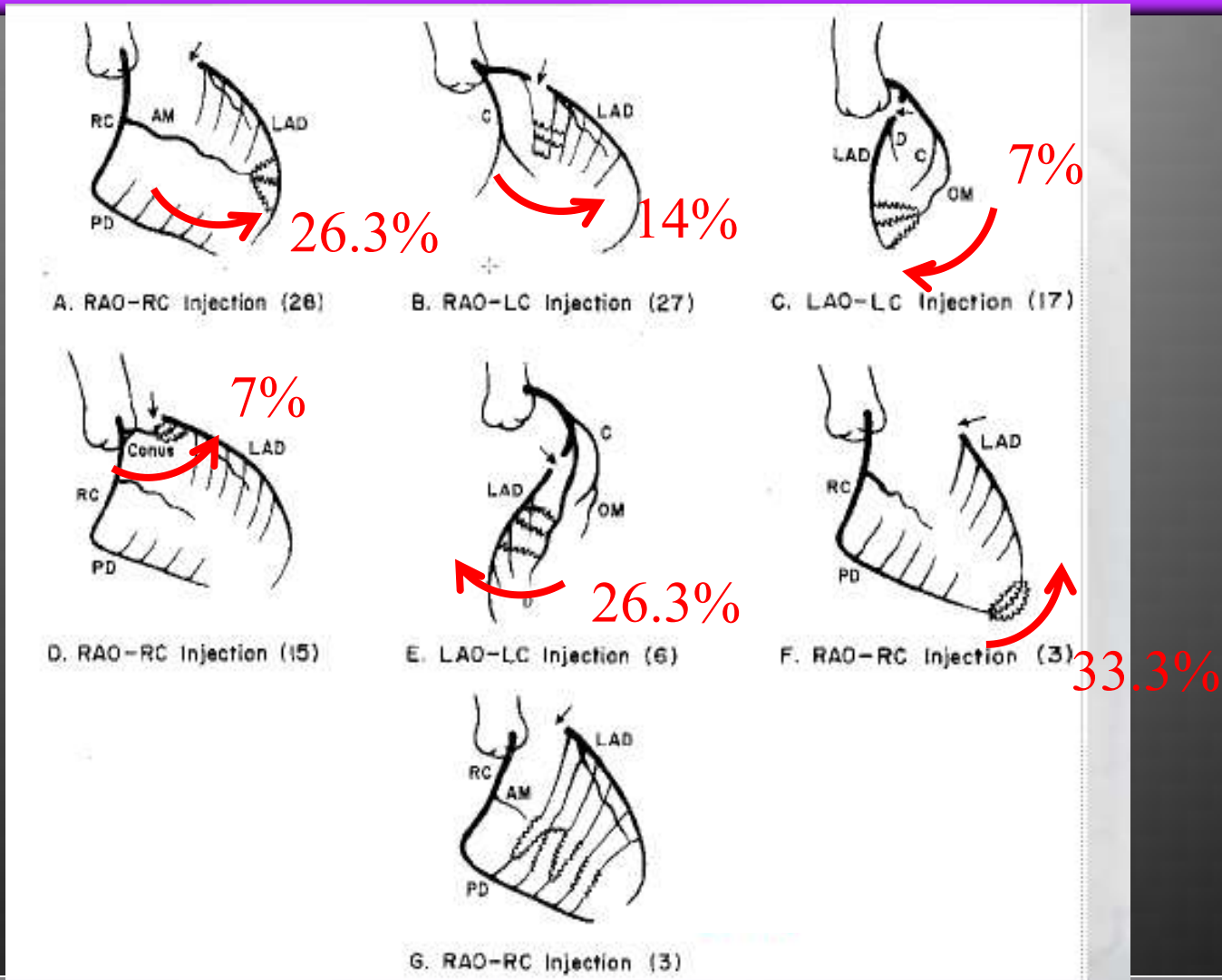


I. LAO-RC Injection (2)



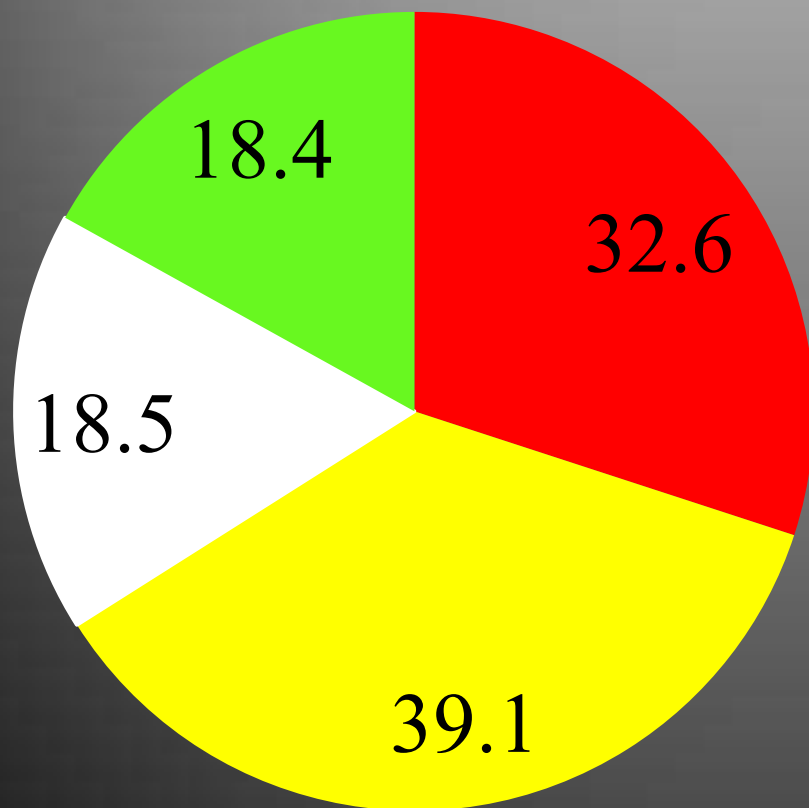
J. LAO-LC Injection (2)

Epicardial Collateral (LAD)

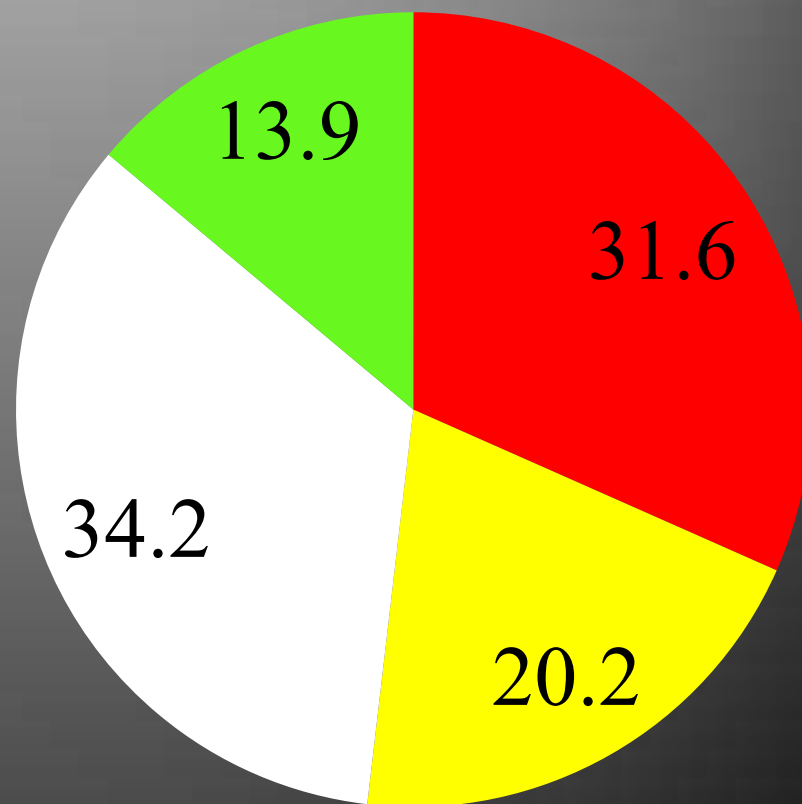


Strategies of retro CTO crossing

2014 n=102

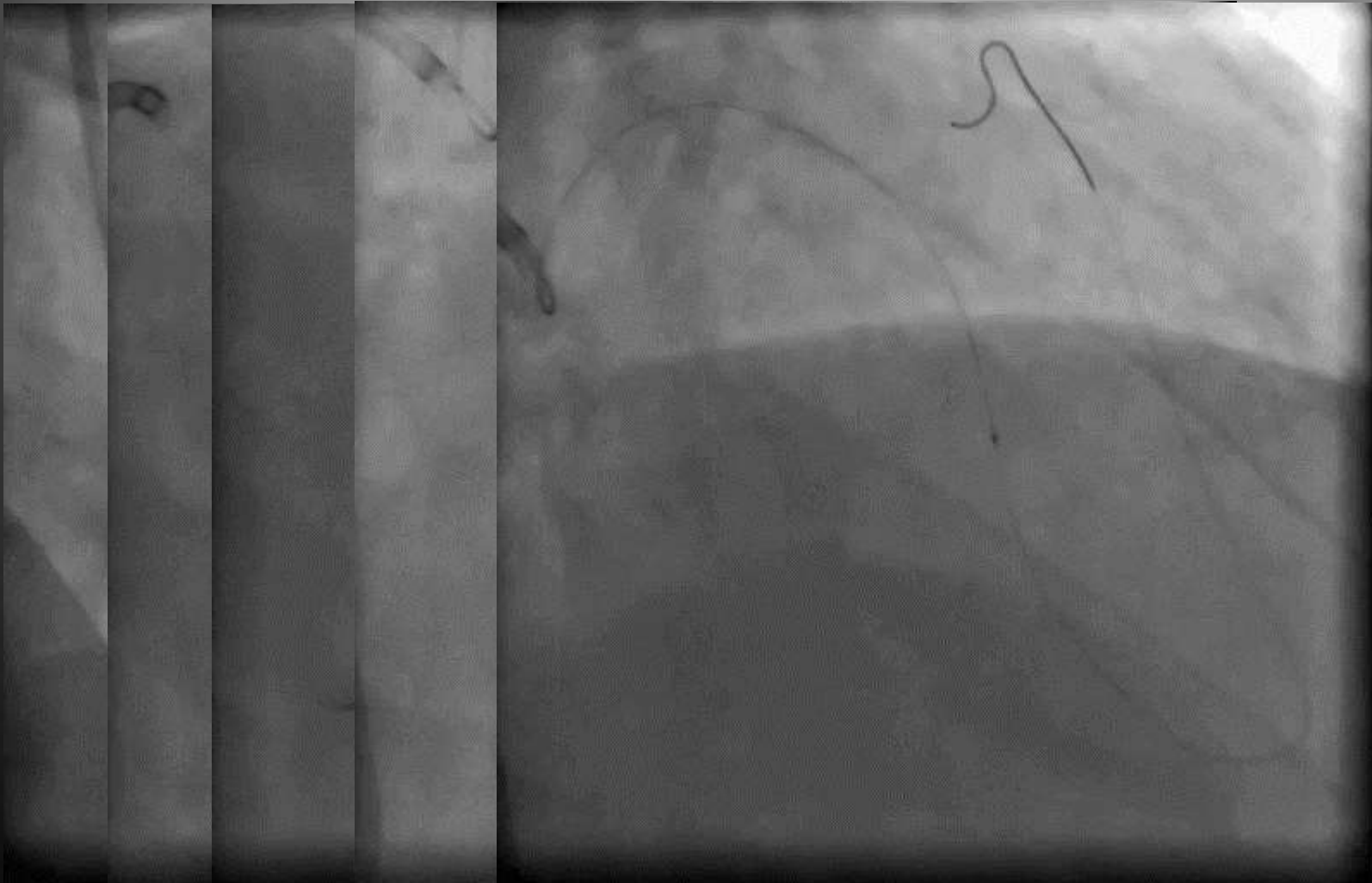


2015 n=85



■ Retro GW ■ KWT ■ r-CART ■ Knuckle

Case of sion black guidewire



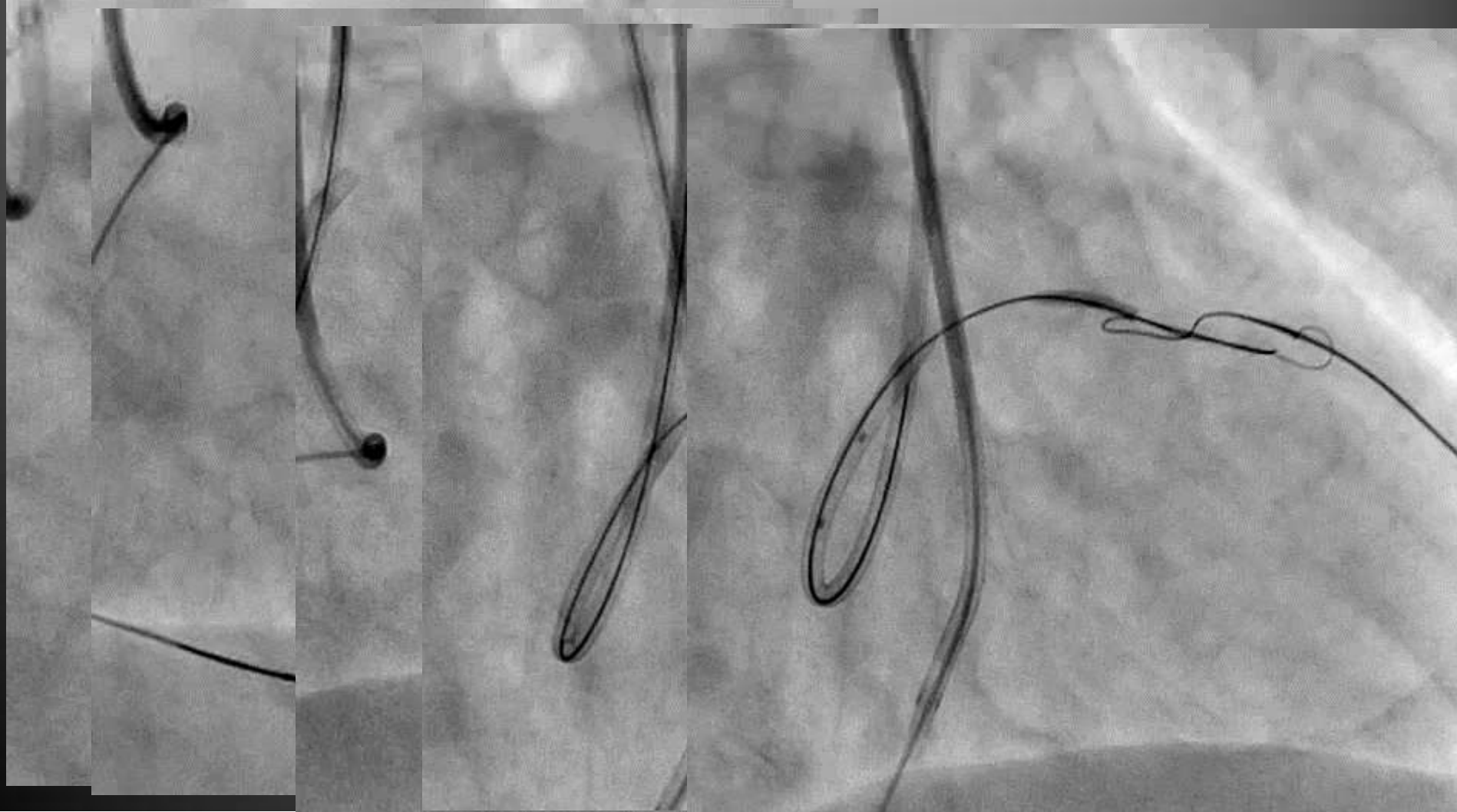
Case of Suoh 03 guidewire



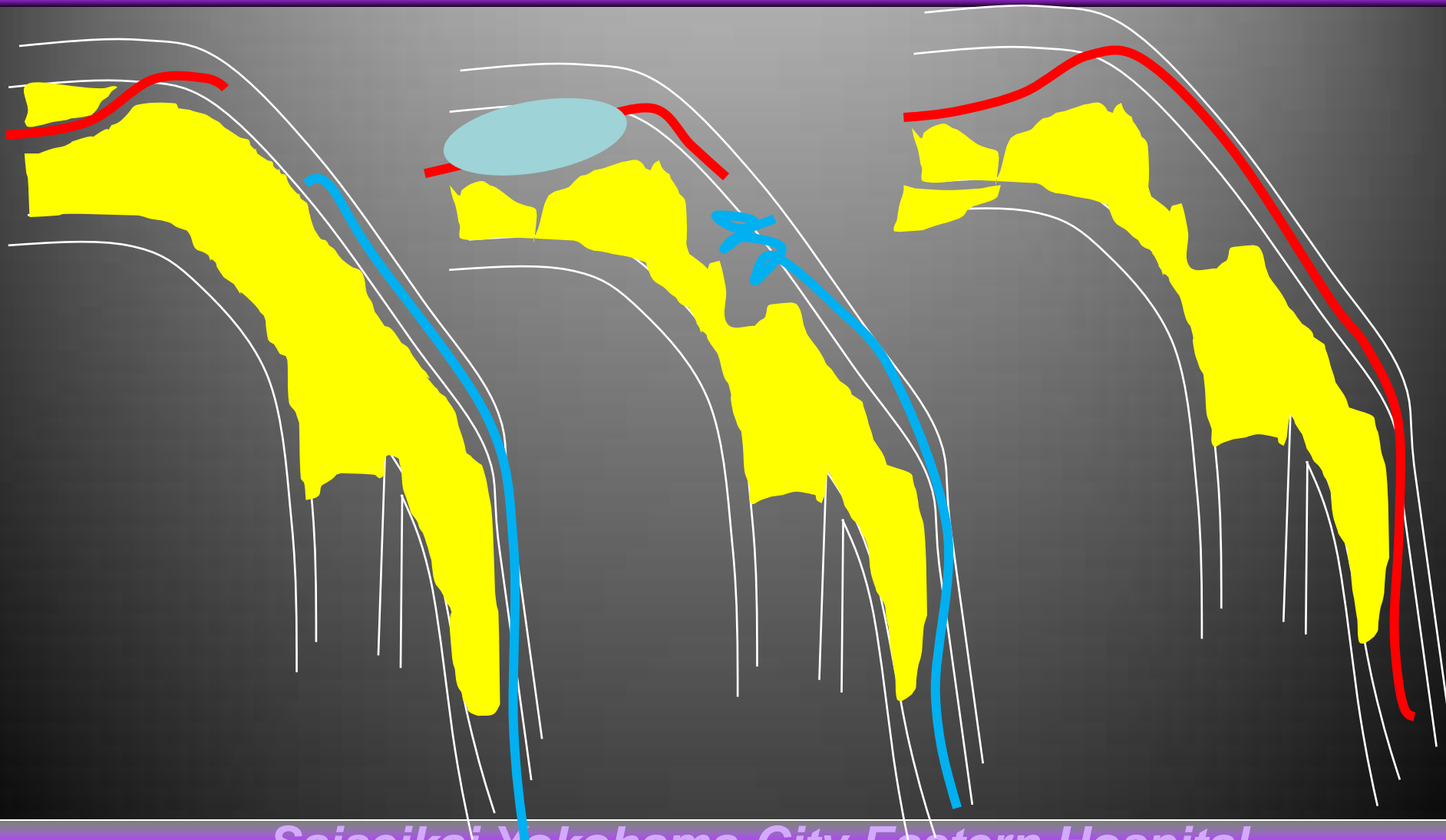
Recent changes of retrograde approach

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Use of Glide sheath

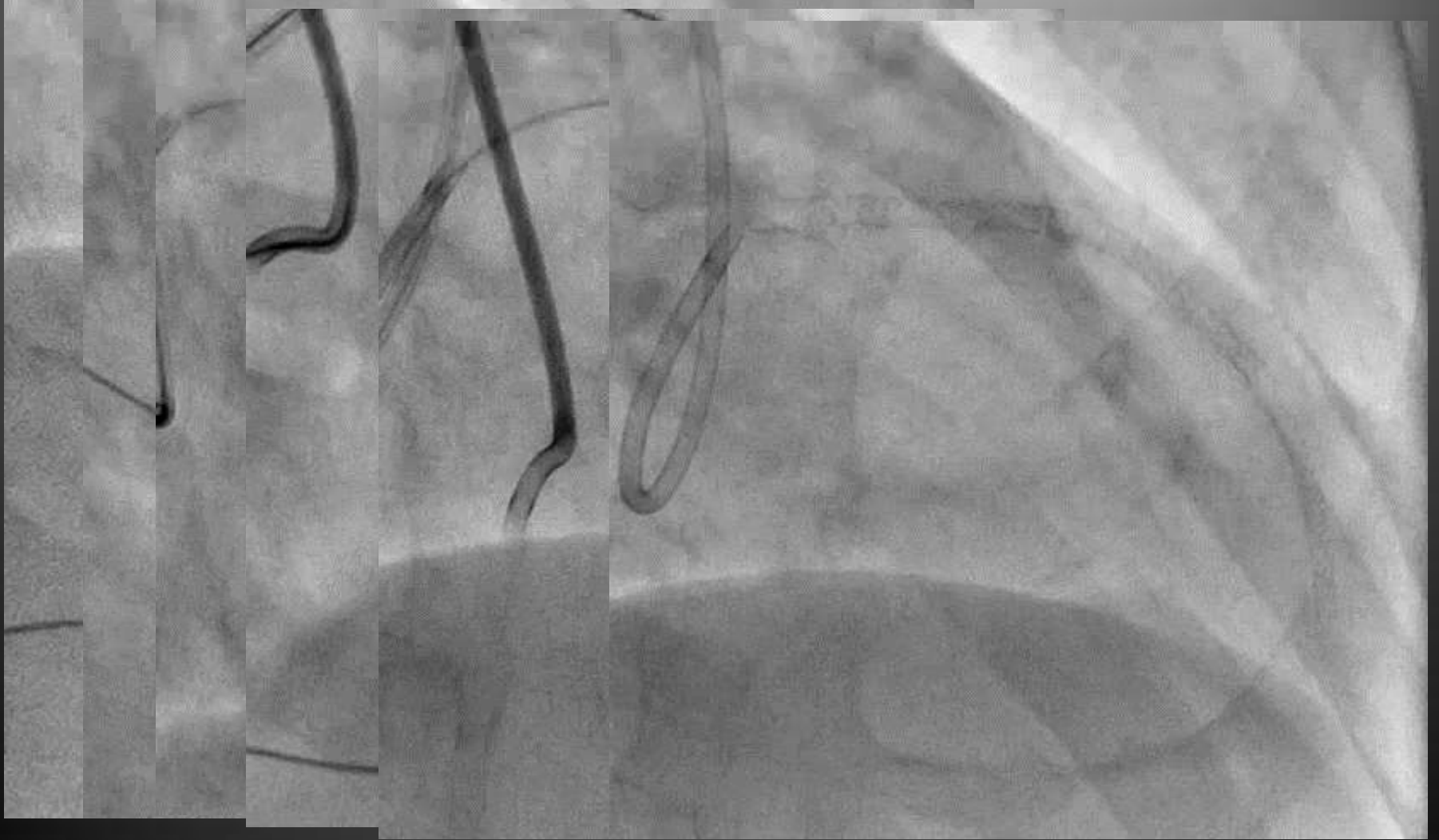
Retrograde reentry case



Retrograde reentry case

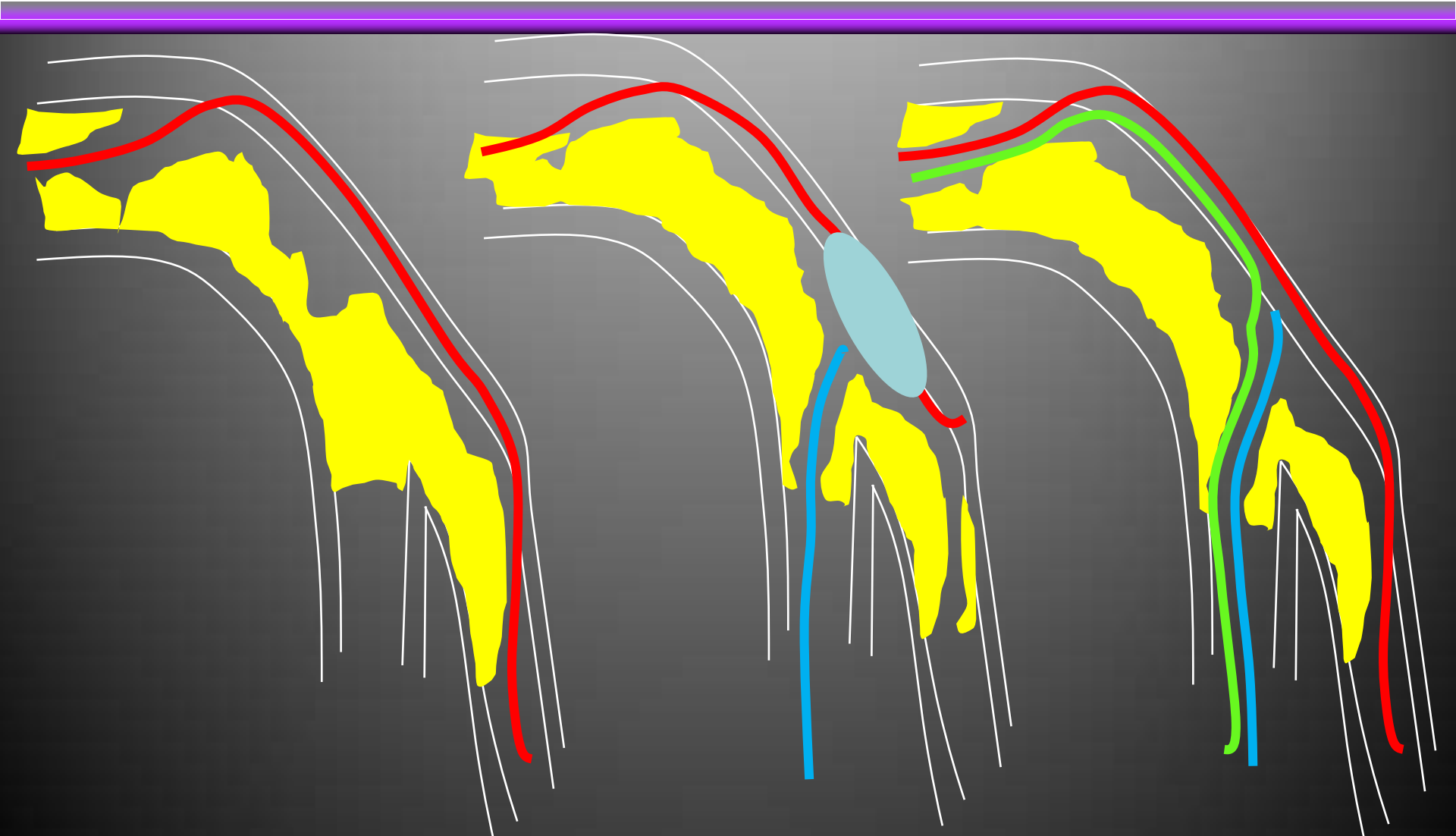


Retrograde reentry case



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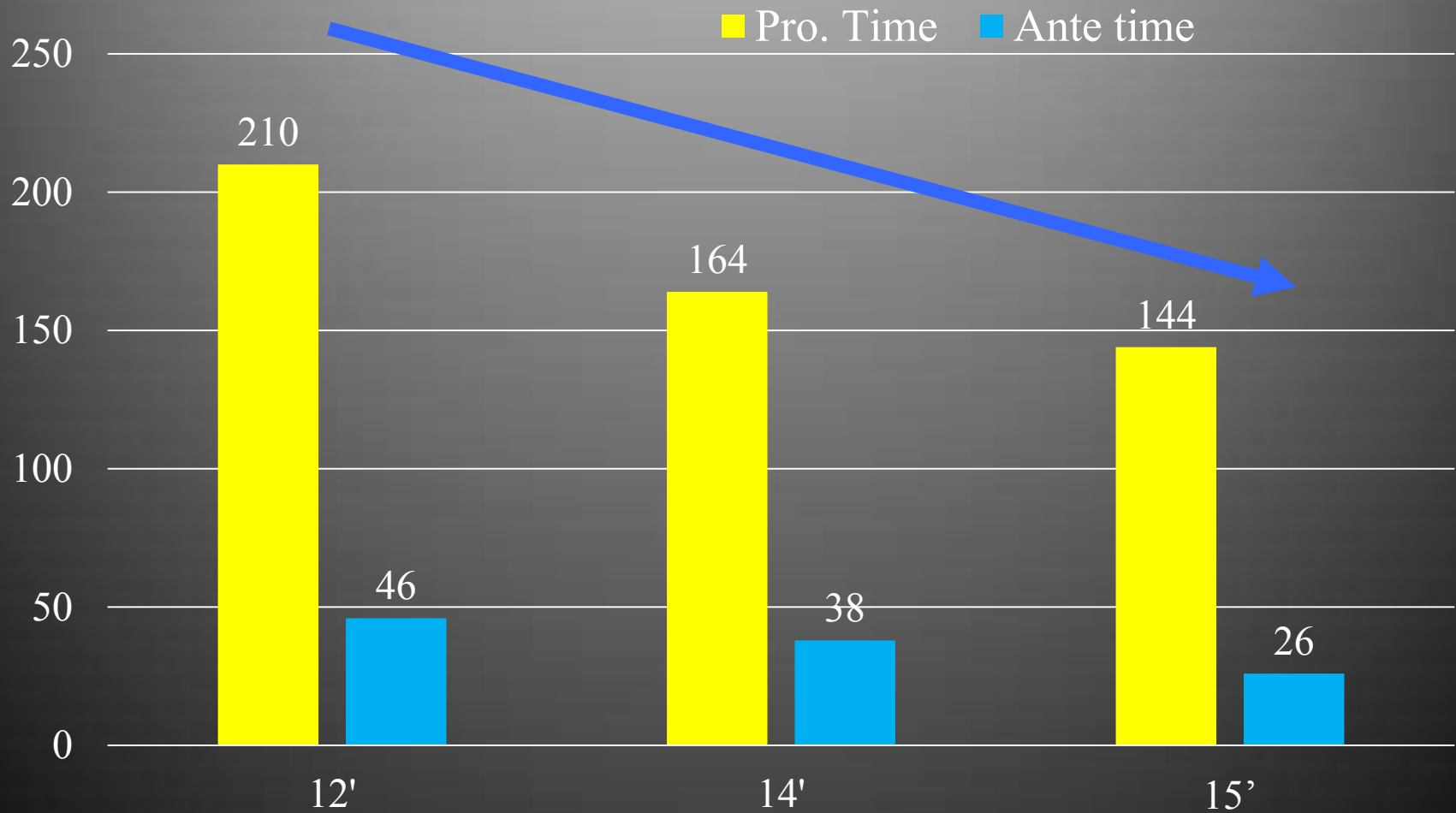
Retrograde reentry case



Recent changes of retrograde approach

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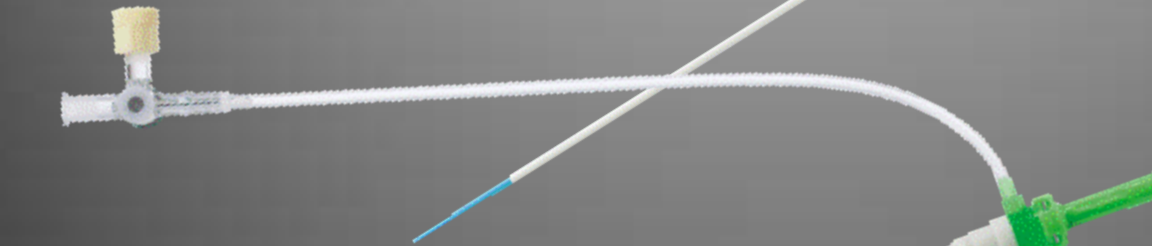
Recent changes of Procedure time



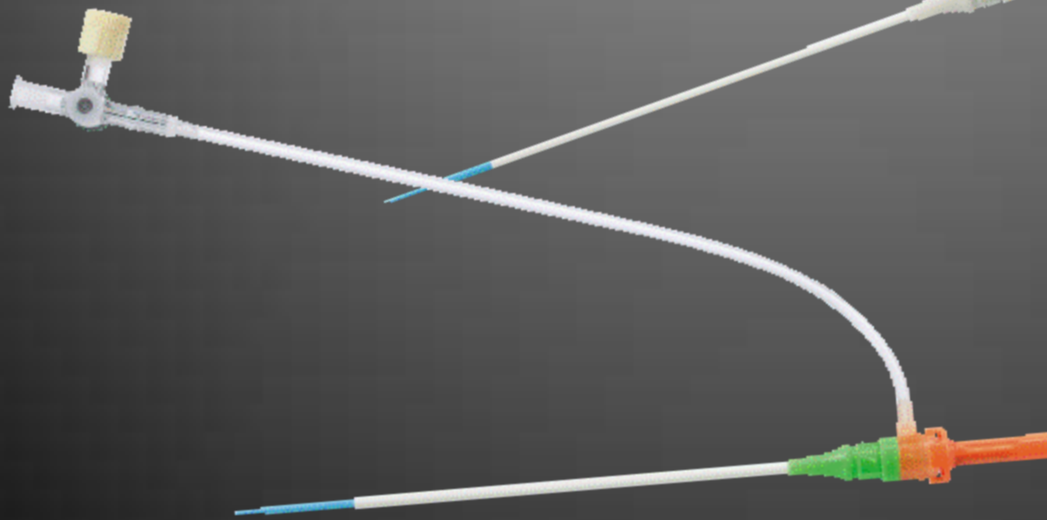
New Glide Sheath



5Fr
Less invasiveness



6Fr
Daily Practice



7Fr
Complex PCI

Take home message

- **New guidewire has been available.
How to use GW for suitable channels.**
- **How to overcome crossing epicardial channel.**
- **Kunckle wire technique is more useful for long calcified CTO.**
- **Saving time and less invasive will be needed.**