

# ~~My~~ Most Frightening Rotablation Case ~ Nightmares Follow ~

**KASHIMA Yoshifumi, MD**  
**Sapporo Cardio Vascular Clinic,**  
**Sapporo Heart Center, JAPAN**

# Disclosure

**Potential conflicts of interest**

**KASHIMA Yoshifumi**

**Sapporo Cardio Vascular Clinic, Sapporo Heart Center**

**I do not have any potential conflicts of interest**

# Introduction

**I have never had any frightening rotablation cases in my own procedures.**

**One day, I witnessed the worst frightening case caused by my colleague.**

**I shared that case in HKSTENT@TCTAP 2019.**

**Do you remember it...?**

**That was only the beginning of the nightmare...**

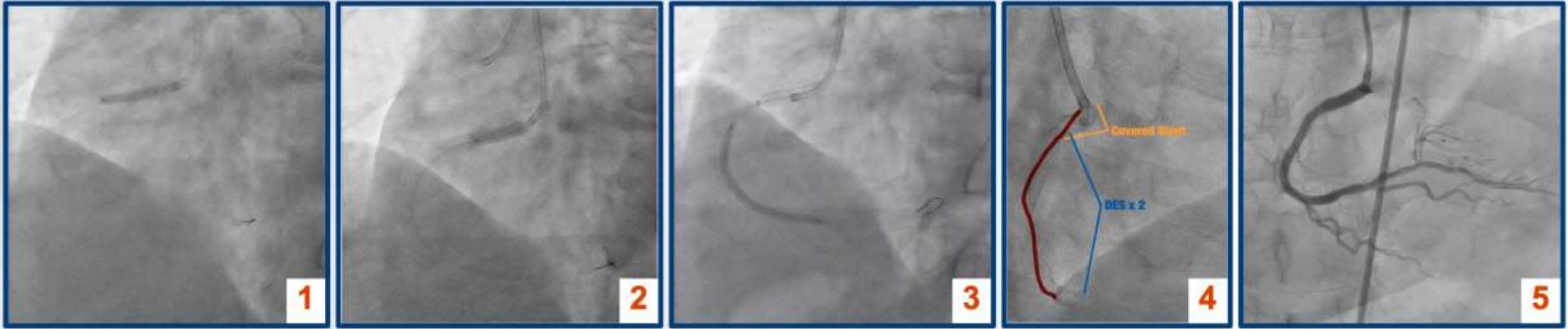
# Nightmare case shared in HKSTENT @ TCTAP 2019



- ☐ Severe stenosis with heavily calcification on proximal RCA (1).
- ☐ He didn't notice the wire flexing when the GC was coming out (2).
- ☐ When the rotablator activated, the wire rupture and the huge perforation was happened (3).
- ☐ The burr had broken through the coronary artery wall and plunged into the myocardium (4, 5).



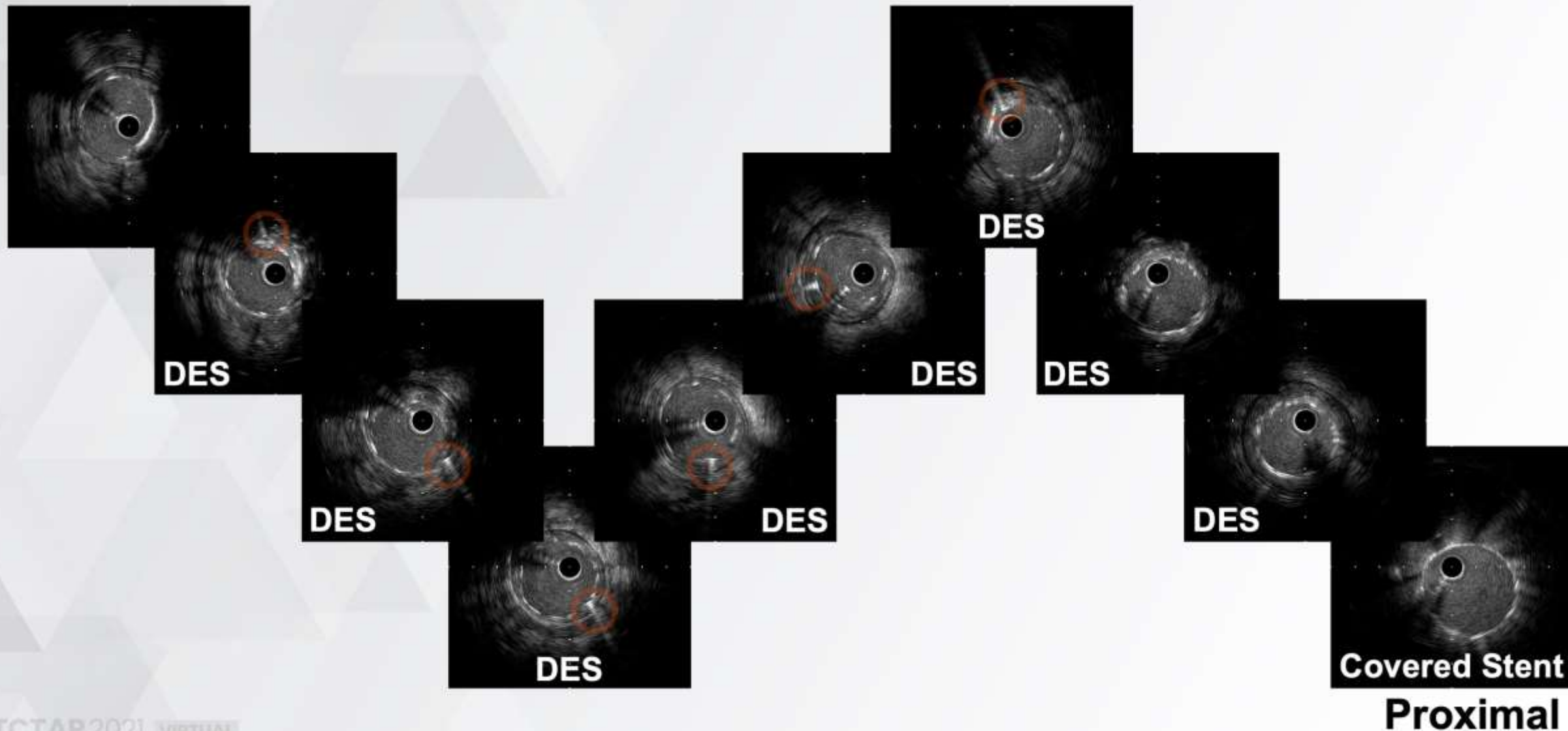
# Nightmare case shared in HKSTENT @ TCTAP 2019



- ❑ Covered Stent was implanted on the perforation site (1).
- ❑ 5.0mm NC balloon was made a dilatation for the completely apposition (2).
- ❑ 3.5mm and 3.0mm DESs were implanted for pressing down the remaining rota-wire (3, 4).
  - ♣ Red line shows the remained rota-wire.
- ❑ Final CAG (5).

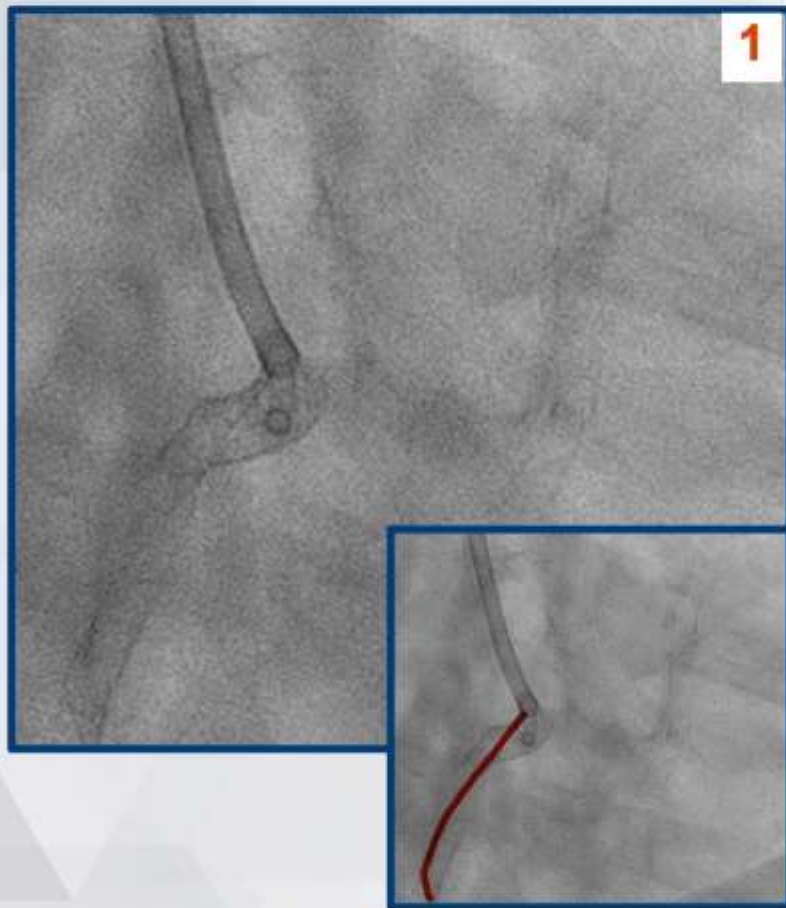
# Nightmare case shared in HKSTENT @ TCTAP 2019

Distal

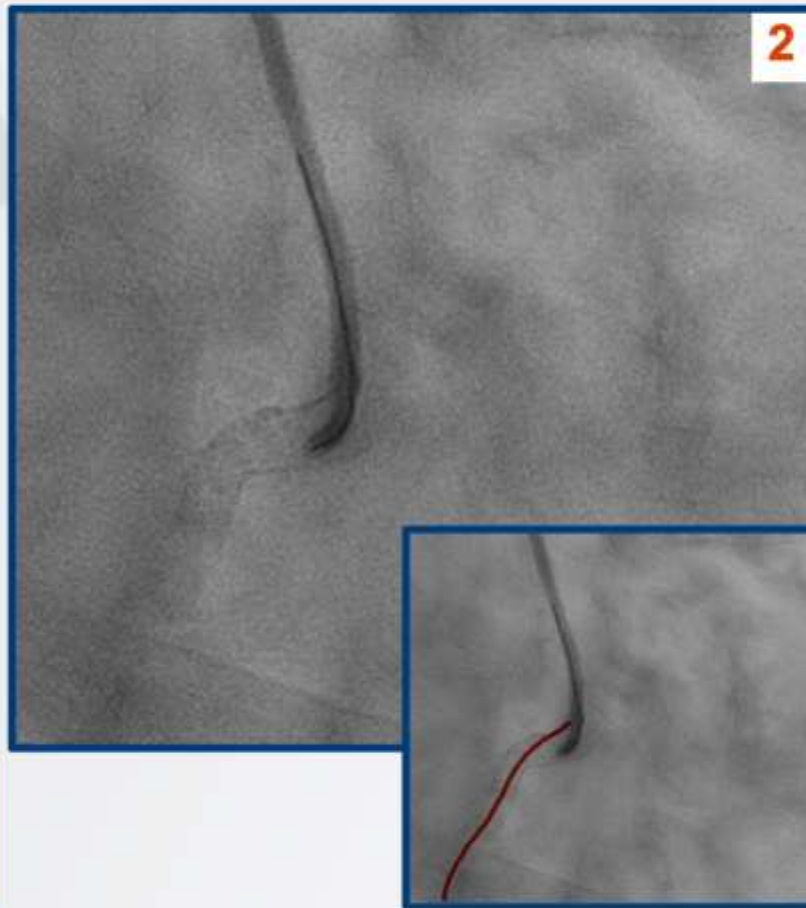


# Remained rota-wire location at F/U

PCI



8M later



20M later





**After 2Y F/U...  
the nightmare was supposed to be over...**



# Hospitalized for acute heart failure just 1M after last F/U

Trivial AR at last FU (20M)



ONLY 1M



Massive AR

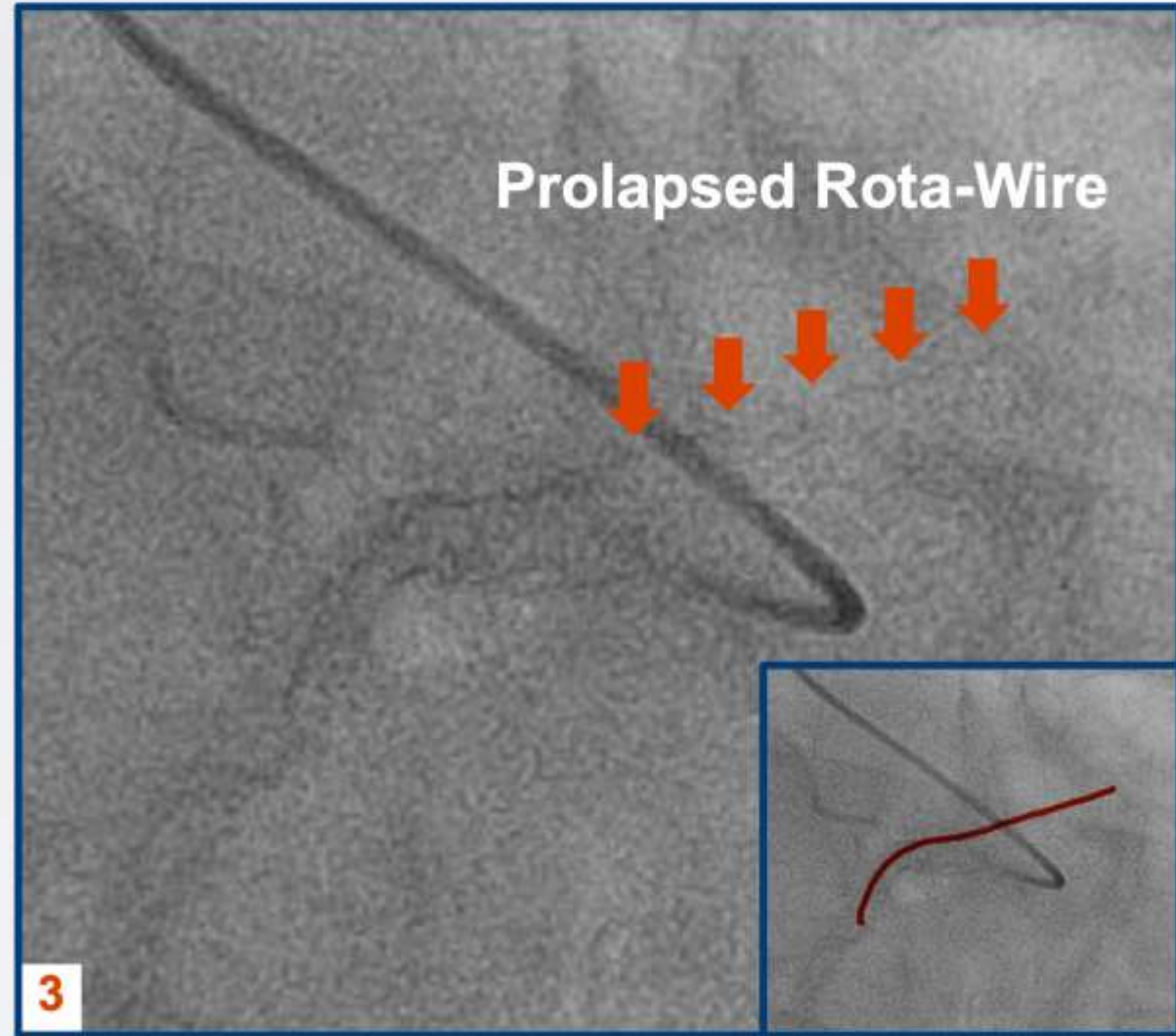


# Cause of massive AR

## TEE

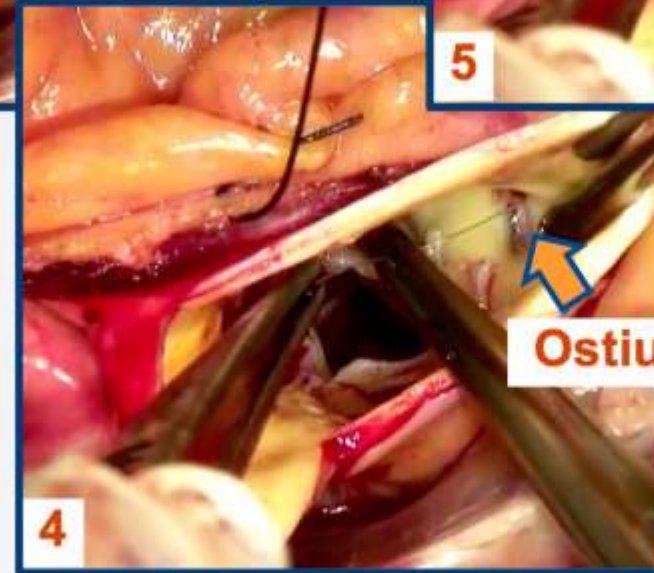
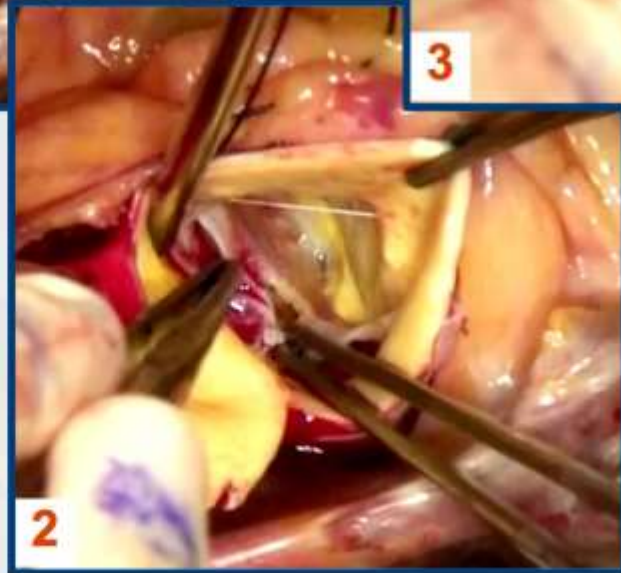
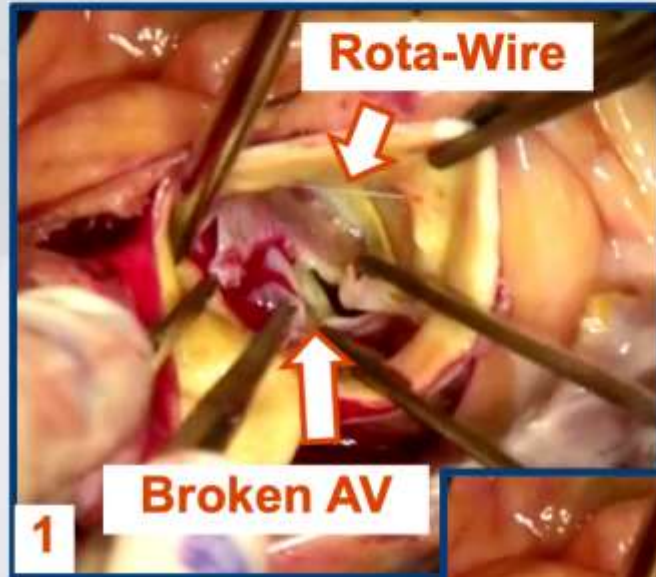


## CAG





# Retrieving the remained rota-wire, and AVR





# Summary ~ Nightmares Follow ~

- ❑ PCI: Rotablation for proximal RCA, then the wire rupture and huge perforation were happened. But, the bailout was success.
  - **Must check a rota-wire position when GC is coming out.**
- ❑ 8M later: No problem.
- ❑ 20M later: Remained rota-wire looked a little out of place, but judged it to be a difference in CAG angle.
  - **Even small changes should be thoroughly examined.**
- ❑ 21M later: Remained rota-wire was big out of place and caused the massive AR. Surgical procedure was performed.

# Take-home Message

- ☐ **The smallest careless mistake can be the beginning of a nightmare that will never be awakened.**
- ☐ **Countless heartbeats and vascular movements can move even a residual foreign body in a coronary artery that should have made bail-out.**
- ☐ **We should be mindful that even small changes should be verified without overlooking them when follow-up.**