#### INTERESTING CASE PRESENTATION

# ECTOPIC CORE VALVE IN THORACO-ABDOMINAL AORTA - LATE OUTCOMES

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2016 AP Valves, Korea



#### **CONFLICTS ON INTEREST**

 I have <u>nothing</u> to disclose concerning this presentation

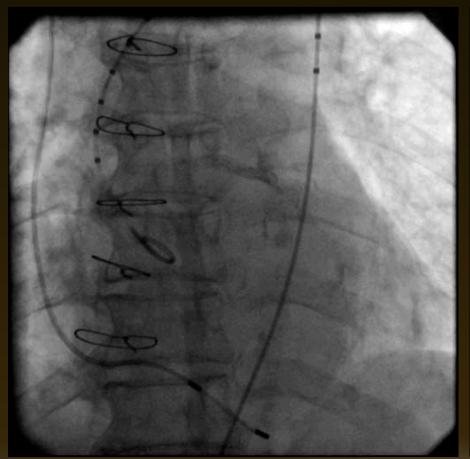
#### CASE PRESENTATION

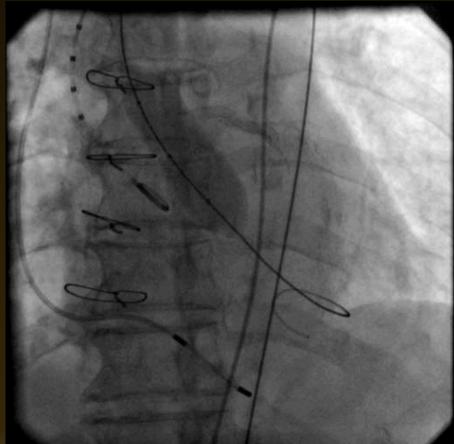
- Miss YT; F/74 DM HT Hyperlipid
- IHD with CABG (SVG to LAD, OM, RCA)
- Severe AS with dizziness; SOB
- Echo: EF 50% Aortic Valves Calcified
- AVA=0.69 cm<sup>2</sup>, Mod MR, PHT
- Proximal Rt ICA = 70% stenosis
- Coro Angiogram :
  - blocked SVG to LAD; SVG to RCA 50%
- Euroscore = 30 %

#### **HEART Team** Decision -

PLAN : PCI to LMN — LAD ( successfully done )
 then for staged TAVI ( in 6-2012 )

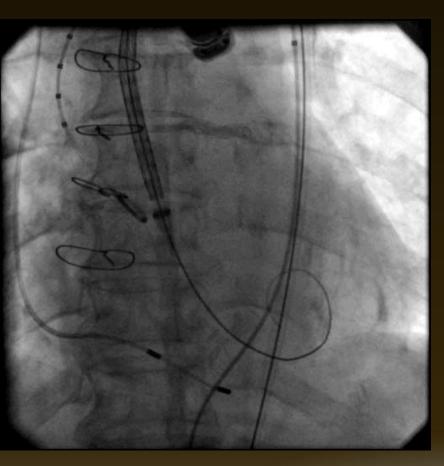
## PROCEDURE (IN JUNE - 2012)

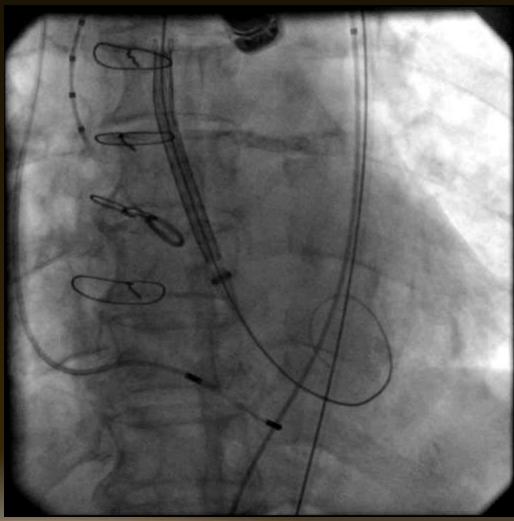




Nucleus balloon Predilatation with Rapid Pacing

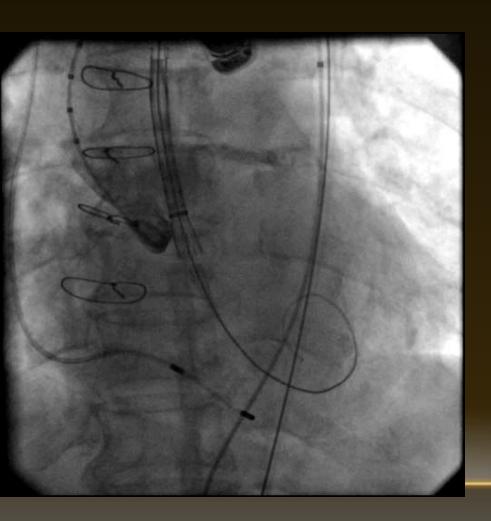
## **COREVALVE - POSITIONING**

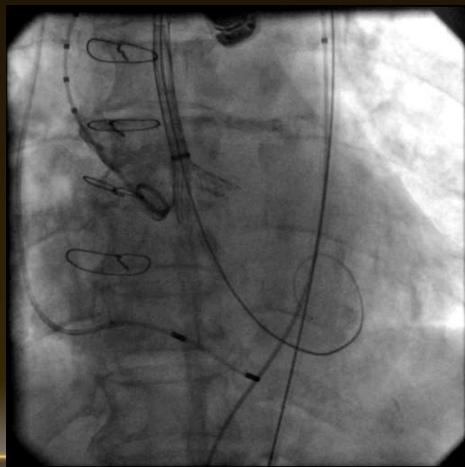




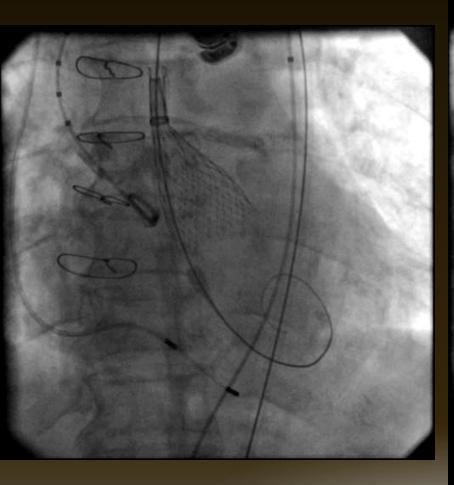
**Aortogram – for Correct Positioning** 

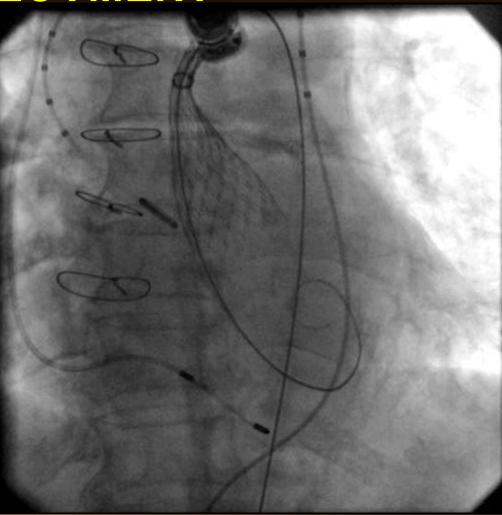
## **COREVALVE DEPLOYMENT**





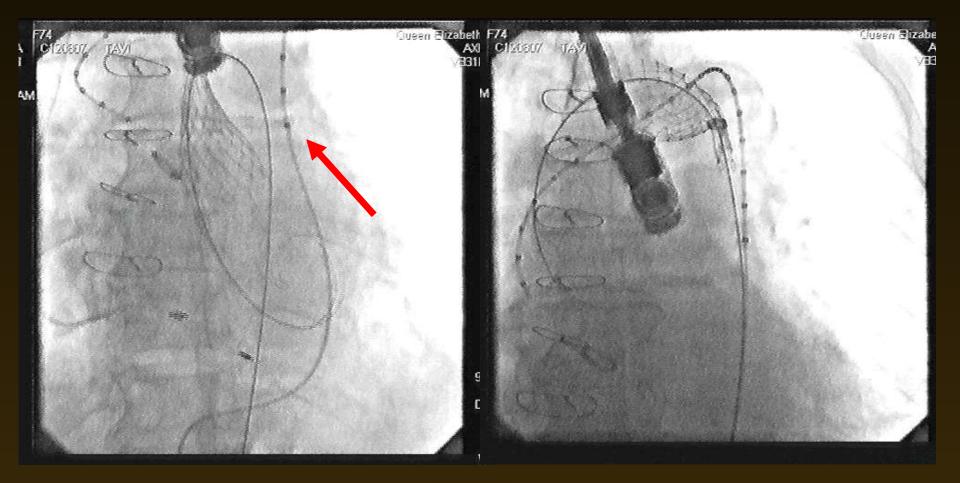
## **COREVALVE DEPLOYMENT**





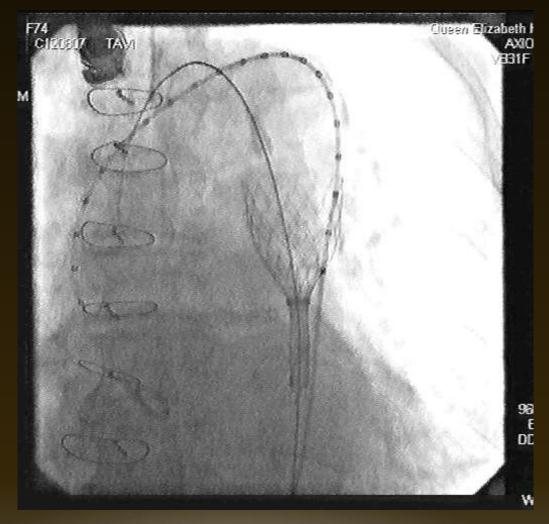
Core Valve Jump Down During Deployment Need to Pull Back the Whole Valve Cautiously

#### CoreValve Retrieval



Core Valve Suddenly Popped up to Around Aortic Arch Region!!!

## **COREVALVE RETRIEVAL**



Try to Retrieve CoreValve BACK to the Delivery sheath and pull back to Descending Aorta

### **COREVALVE RETRIEVAL**



CoreValve was STUCK by the Calcium
Failed to be Retrieved back to the Sheath!!

## Review of CT Scan





#### Heavily Calcified



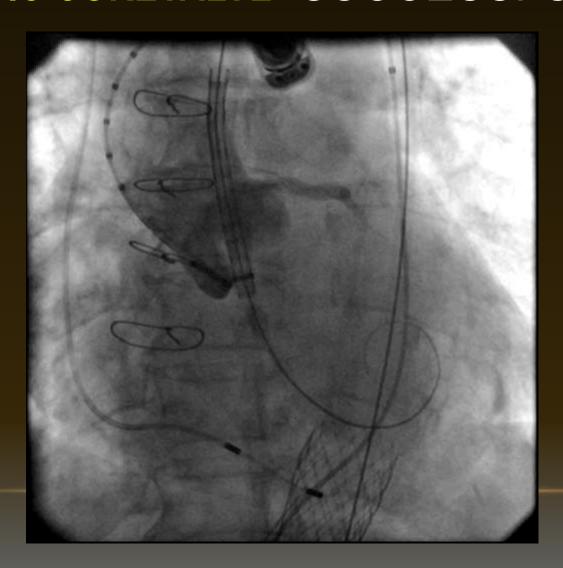
## REMEDIAL MEASURES



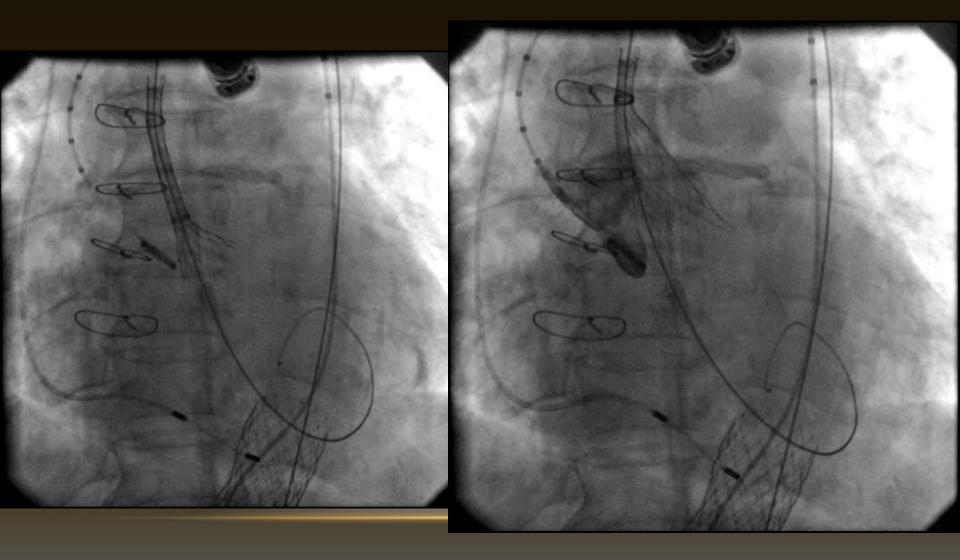


CoreValve Deployed in the Thoraco-Abdominal Aorta!

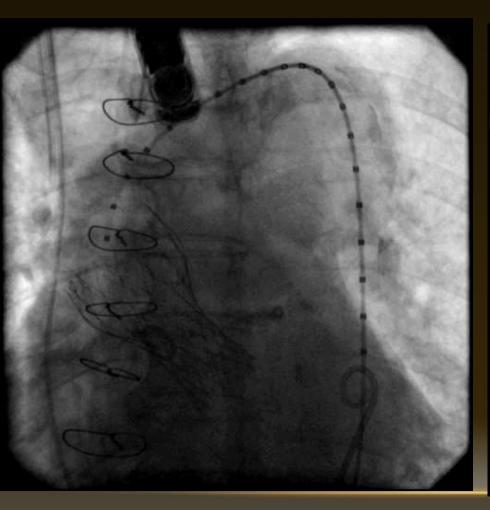
# 2ND CORE VALVE DEPLOYED THROUGH THE ECTOPIC COREVALVE SUCCESSFULLY



## **DEPLOYMENT OF 2ND COREVALVE**



## FINAL RESULT





## FINAL RESULT



NO GRADIENT ACROSS Thoraco-Abdominal CoreValve

#### PATIENT OUTCOME

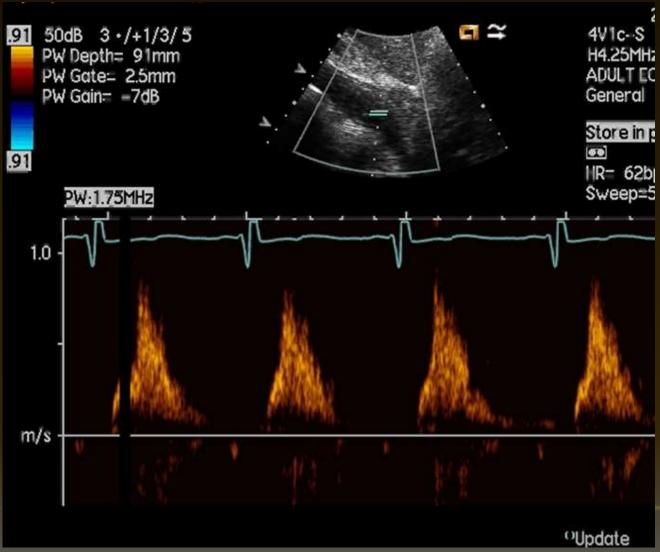
- Marked improved in Exercise Tolerance
- Peripheral pulses +ve
- Psychologically happy as get a BONUS Valve !!
- NO Abdominal c/o
   Increased lower limbs muscle strength
   Increased appetite
  - Reduced constipation? (Likely Psychological)
  - (?? Unlikely related to the Ectopic CoreValve)
- 4 year FU (50 mth) Follow up Asymptomatic
   FC1
  - Good Exercise Tolereance
  - Also Need Close Surveillance of the CoreValve in Ectopic Position

# 50 MONTH FU – DUPLEX ABDOMINAL USG AND ECHOCARDIOGRAM



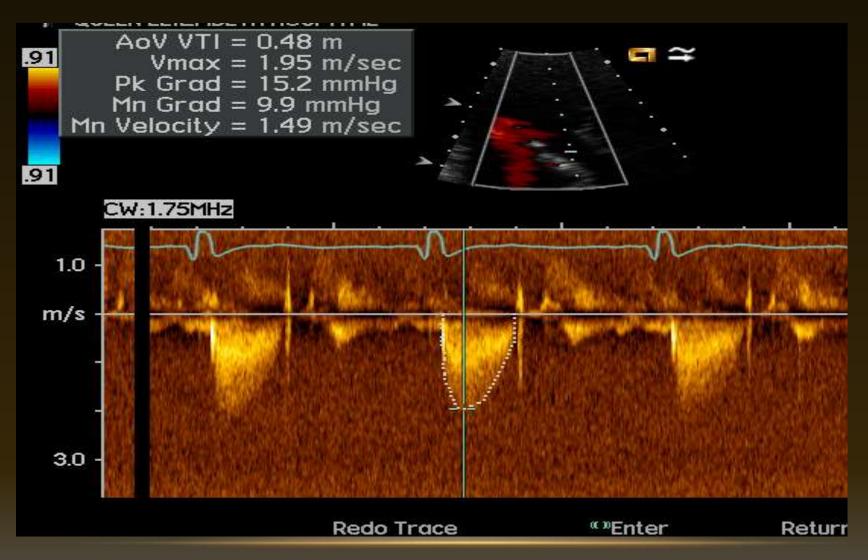
Abdominal CoreValve Function WELL with NO significant gradient

#### **50 MONTH USG FOLLOW UP**



Pulsed Doppler of the Abdominal CoreValve

### 50 MONTH ECHOCARDIOGRAM



**Core Valve Function satisfactory** 

#### **LESSONS TO LEARN**

- Beware of / Prepare for CoreValve Embolisation or Mal-position during / after deployment
- Attention to the rest of Aorta (Arch; Descending) for severe calcification
- Never PULL too hard to avoid Acute Aorta Rupture or Trauma
   Catastrophy
- Deploy Core Vave in Descending Aorta is an alternative option for complicated or Impossible retrieval cases
- Close Surveillance of the CoreValve in Ectopic position is important to look for LATE Complications
- Our case has illurstated that the Corevalve Function well in the T-A Aorta up to 4 years
- With the Latest generation Retrievable and Repositionable Valve; the chance of this complication in Valve retrieval will be reduced

## • Thank you!