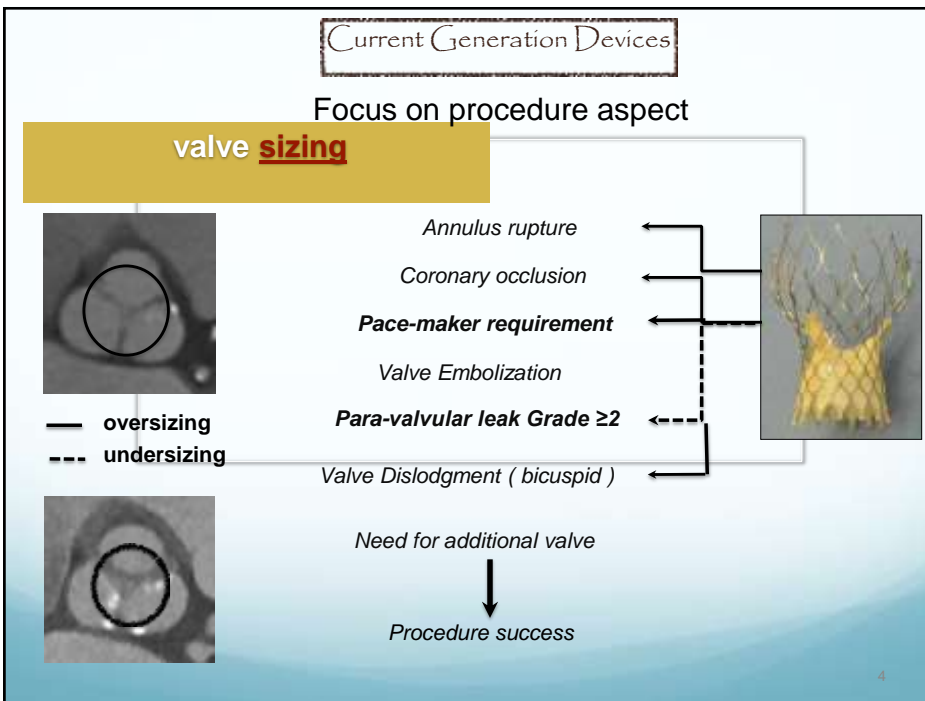
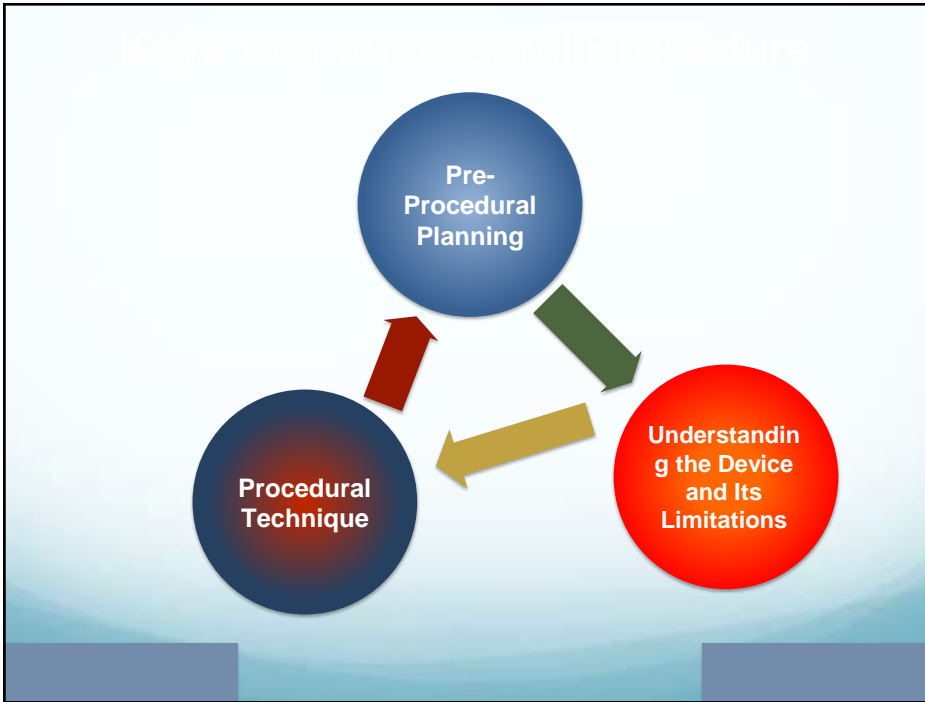


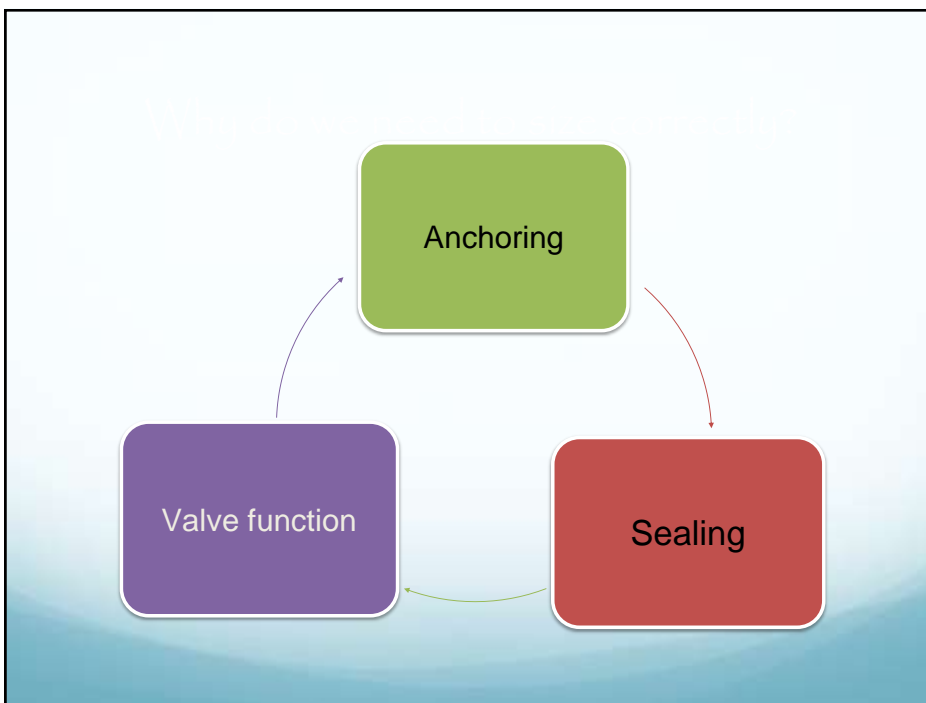
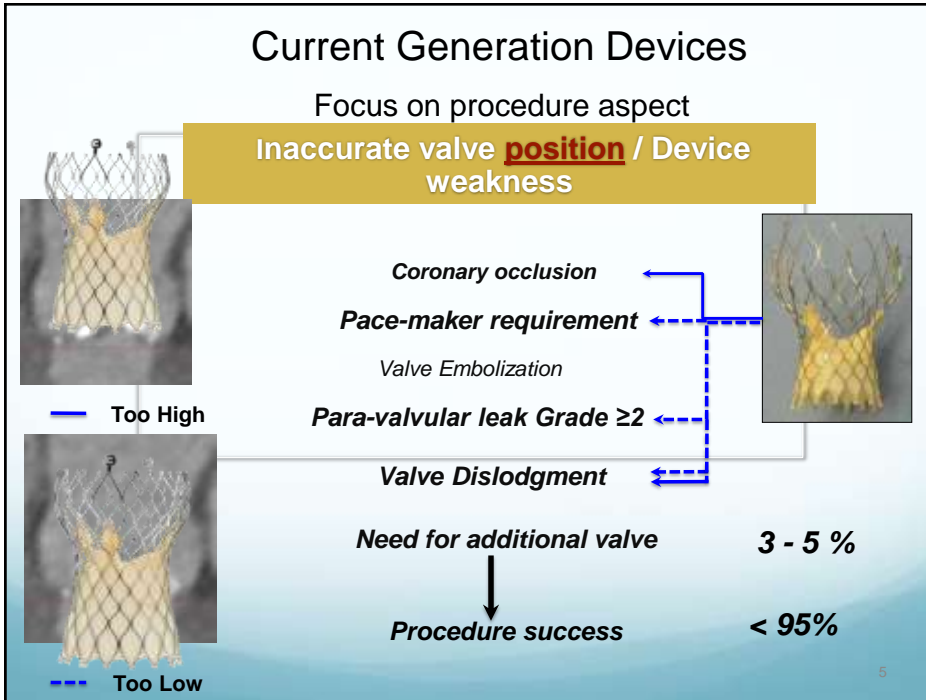
TAVI IN SPECIAL SITUATION

YASSER SADEK, MD
NATIONAL HEART INSTITUTE

Defining a Successful Procedure

- TF TAVR with percutaneous access and closure
- Successful intra-annular deployment
- None/Trace paravalvular AR
- No major vascular, major bleeding or neurologic complications
- Early mobilization







Case 1

BIG AORTIC ANULUS

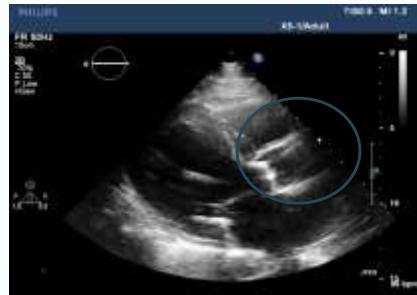
Clinical History

- 80 years old male
- Diabetic on insulin (20 years)
- Hypertensive on Bisoprolol and Amlodipine (15 years)
- AF on anticoagulation
- PVD, claudication at less than 50 meters
- COPD on chronic inhalers
- Renal impairment.

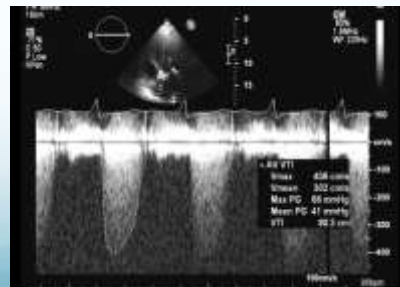
Clinical History

- He was poorly mobile due to his musculoskeletal problems
- Shortness of Breath on moderate exertion
- STS PROM: **10.87%**
- Euro Score II: **14.9%**

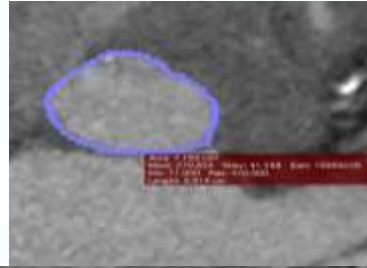
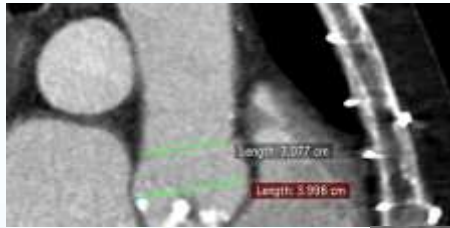
Echocardiography



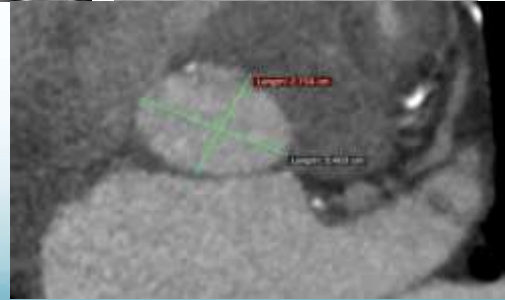
AVA= 0.6 cm²
Peak/Mean =86/41 mmHg
Mild MR



CT Aortic Valve

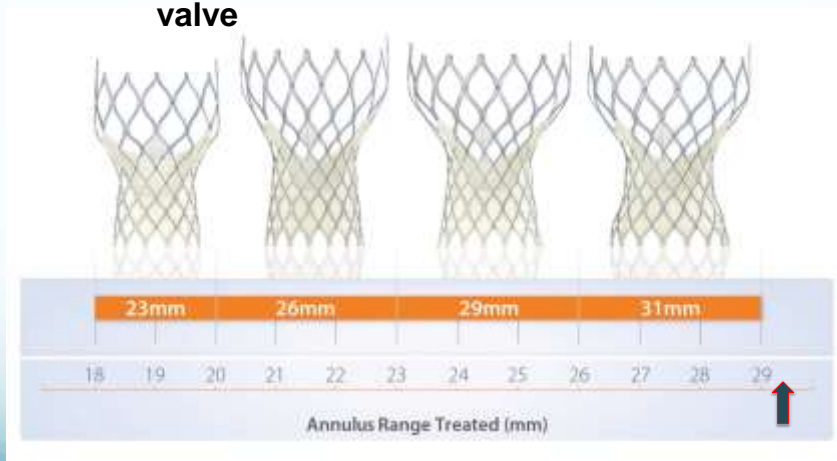


Perimeter of
99.0mm
Area of 71.8
mm²
Mean Annular
Diameter
30.6 mm



CT Aortic Valve

**34Evolute R
valve**



Follow up

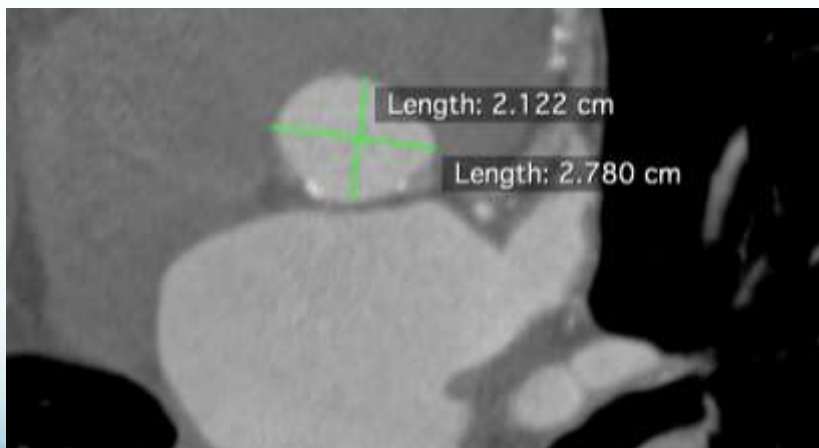
- Smooth course in the hospital and discharged after 3 days.
- No conduction defects(no Pacemaker).
- TTE and TEE showed mild paravalvular leakage.
- 3 months later TTE showed mild paravalvular leakage .

Case 2

TAVR with Coronary artery disease

- Male patient aged 79 ys old.
- He known as IHD and he did PCI to LAD 6 years ago.
- He has low flow low gradient aortic stenosis(EF 29% and with doputamine stress test the mean gradient was 46mmgh).
- He complained recurrent attacks of pulmonary edema.
- His creatinine level was 1.6mg/dl.

CT work up



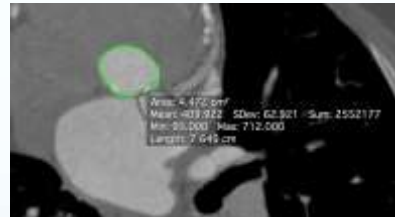
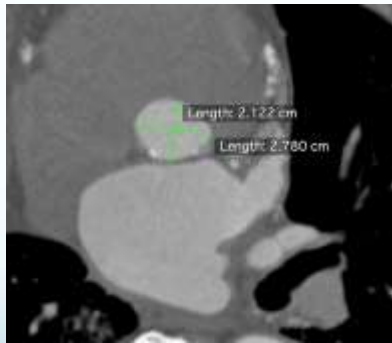
Follow up

- The pt doing well for 2 years now.
- His EF is 50% now.
- His labs within normal.

CASE 2

- Male patient aged 71 ys old.
- He did CABG 10 ys ago.
- Discovered of severe aortic stenosis 2 years ago.
- He complained recurrent attacks of pulmonary edema.
- His lab is within normal.

MSCT



After the procedure

- He complicated with complete heart block after 24 hours.
- TTE showed mild to moderate mitral regurgitation.
- DDD permanent pacemaker was inserted.

48 hours later

- The pt arrested and CPR was done for 10 min successfully.
- Urgent TTE and TEE was done and revealed severe mitral leaflets obstruction and severe aortic regurgitation.
- So the pt transferred to cath lab

WHAT TO DO?



Follow up

- The pt doing well for 3 years.
- Mild aortic regurgitation.
- Now he is regaining his sinus rhythm.

Take Home Message

- ◆ Decision making in elderly individuals with multiple comorbidities is both a science and an art.
- ◆ Procedural success critically depends on proper selection, meticulous preplanning, experienced teams (interventional and surgical) and well equipped units. A good TAVI operator is simply not enough.
- ◆ In fact we had a lot of lessons from such of those cases.

