Progress In TAVR: A Cardiac Surgeon’s View: What Is The Current Place For Open Surgical Aortic Valve Replacement

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What Is Aortic Valve Stenosis?

- Calcium deposits in the aortic valve over decades; restricts opening
  - The patient did nothing to cause this (risk factors: age, genetic)

Survival for Patients With Aortic Stenosis

Aortic Valve Replacement

Financial Disclosure

- Medtronic, Edwards
- Atricure, Terumo Aortic, Bard, Neomend (not relevant)
~250,000 TAVR Procedures Worldwide

Patient Risk Strata Defined by AHA/ACC Guidelines

Power of disruptive technology and ingenious Marketing!

Surgeons in an Interventional World!

*If we do not embrace innovation we will become its victims*

Robert Grayton, Presidential address at the 40th annual meeting of STS
SAVR is safer than ever!

STS Database
Unadjusted Valve Operative Mortality
Cumulative over past 10 years

Safer in higher volume centers
Safer in less symptomatic patients
STS 1997 Mortality:
NYHA I & II 2%
NYHA III 3.7%
NYHA IV 7%}

Ministernotomy for AVR

Results

Conclusions

- TAVR is a transformative approach for majority of patients with isolated aortic valve stenosis!
- TAVR is now approved for low-high risk patients.
- Patients need to have an informed consent by heart team
- Surgeons should learn minimal-invasive SAVR
- SAVR is here to stay for specific indications

Ministernotomy for AVR

Technique

What is current role of SAVR

- Very young patients
- Bicuspid patients
- Patients with atrial fibrillation/stroke
- Patients with root/ascending over 4.5cm
- Patients with poor access
- Patients with small or large aortic annulus
- Aortic Valve repair
- Redo AVR (Russian doll effect)
- Multi-component operations (CABG, other valves)
Thank you!