

The role of the surgeon in the TAVI procedure – Past, Present and Future

Gil Bolotin MD, PhD
*Rambam Health Care Campus,
Haifa, Israel*

Is there a role for
the surgeon
in the TAVI procedure?

Background

- The early days:
 - Decisions
 - Approach
- Heart team
- Cultural differences
- The gate keeper?
- Common training
- The apex, past, present and future?

The early days – Decisions

- TAVI - experimental procedure
- Compared to well-established AVR
- Inoperative patients
- High-risk patients
- The role of the surgeon:
 - Operative risk
 - Participating in the TAVI procedure

The early days - Approach

- Sheet size: 26-30-32 fr.
- Open trans-femoral (cut down)
- Trans-apical
- Trans-axillary
- Trans-aorta

The early days - Trans-femoral

- Pro:
 - Less invasive
- Con:
 - Vascular complications!
 - More contrast
 - Far away

The early days - Trans-Apical

- Pro:
 - Easy
 - Close – easy to implant
 - Large sheets
 - Less contrast
- Con:
 - More surgery
 - More demanding
 - Learning curve

The early days – Femoral vs. Apical

- “Political” decision
- Major differences between centers
- The best approach for the patient
- Heart team approach

Heart team

- Major contribution of TAVI
- When “should” be done:
 - TAVI
 - Mitral interventions
 - Coronary patients

Today: Femoral vs. Apical vs. Trans-Aorta

- Sheet size: 14-16-18 Fr.
- Better implant technique
- Local anesthesia
- Trans-Apical - Bad reputation
- $50\% > 30\% > \underline{10\%} > 5\% > 0\%$

Trans-Apical vs. Trans-Aorta vs. Trans-Axillary

- My personal view – Trans-Apical
 - Less invasive
 - Very safe
 - Good results
 - Learning curve
 - For future procedures

The role of the surgeon in the TAVI procedure - Today

- Political
- Commercial
- Gate keeper
- Heart team
- Like the coronary patients?
- Joint training

The role of the surgeon in the TAVI procedure - Today

- My view – Ideal:
 - Heart team
 - Team work in the cath lab
 - Closure device
 - Help to keep objective decisions
 - 5⁰%-10⁰% of centers

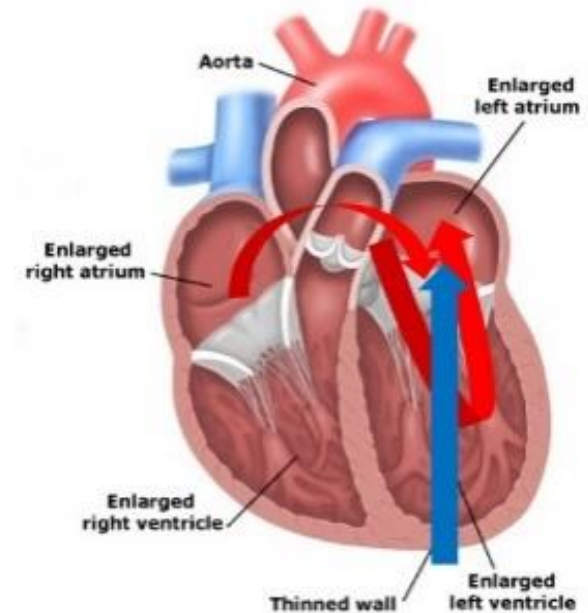
The role of the surgeon in the TAVI procedure - Today

- Trans-apical:
 - Keep the technique
 - For 5⁰%-10⁰%
 - For future procedure:
 - Mitral Valve Replacement!
 - NeoChord
 - Other

Mitral Valve Replacement - TMVR!

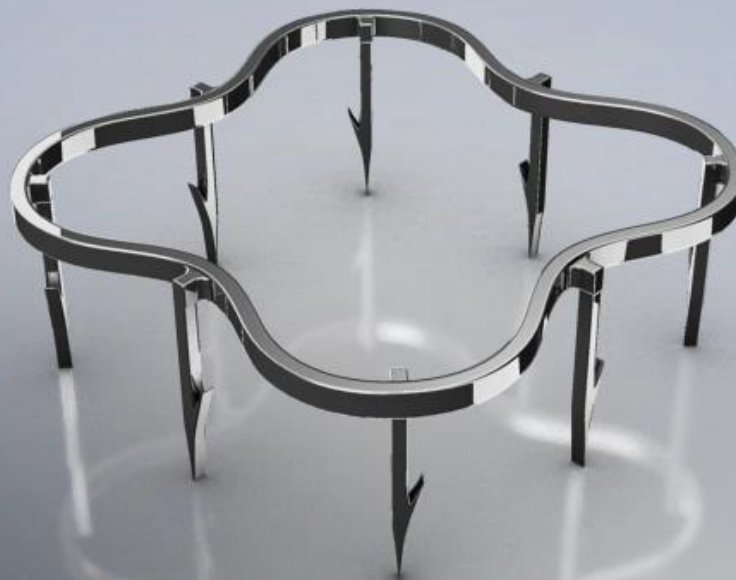
Why apical access for TMVR?

- **Size**
- **Avoiding the aorta**
- **Contrast**
- **Directions**



Future trans-apical approach:

a Novel Cardiac Closure Device which
Opens a New Gate Into the Heart



Novogate



Is there is a role for the surgeon in the TAVI procedure?

Yes, in the past, in the present and **in the future!**

The role of the surgeon in the TAVI procedure – Past, Present and Future

Gil Bolotin MD, PhD
*Rambam Medical Center,
Haifa, Israel*