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

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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 role of the surgeon in the TAVI procedure

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% > 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
• 5%-10% of centers
The role of the surgeon in the TAVI procedure - Today

- Trans-apical:
  - Keep the technique
  - For 5%-10%
  - For future procedure:
    - Mitral Valve Replacement!
    - NeoChord
    - Other
Mitral Valve Replacement - TMVR!

Why apical access for TMVR?

- Size
- Avoiding the aorta
- Contrast
- Directions
The roll of the surgeon in the TAVI procedure

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!
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