Current Surgical Strategies in the Management of Tricuspid Valve Endocarditis

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Disclosure

Medtronic inc. Consultanting

Johnson & Johnson Advisory Board

Edwards Lifesciences Corp. Consultanting
Functional vs Organic Tricuspid valve Regurgitation

• **Functional TR is secondary to pulmonary HTN or left sided lesions (usually MS / MR):**
  – Normal leaflets
  – Dilated TV annulus

• **Organic TR is secondary to TV disease:**
  – Rheumatic heart disease
  – Acute endocarditis
  – Trauma (incl. iatrogenic)
  – Ebstein’s anomaly
  – Carcinoid syndrome

Repair

Repair/Replacement
Type of valve Repair

Organic
- Resection
- Patching
- Sliding plasty
- Commissurotomy
- PM split
- Neo-Chordae

Annuloplasty
- "STITCH"
- "RING"
- De Vega
- Bicuspidisation

Functional

Annuloplasty

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TRICUSPID VALVE ENDOCARDITIS

- INTRAVENOUS DRUGS USER
- Cardiac implantable electronic device infection
- Indwelling lines:
  - Hemodialysis 30-40%
  - Parenteral nutrition 40-50%
  - Chemotherapy 8-10%
  - Staphylococcus Aureus 60-90%
  - Pseudomonas aeruginosa
  - gram-negative microorganisms
  - Fungi
  - polymicrobial infections
  - Less frequently

n=110/43
SURGICAL OPTIONS

TRICUSPID VALVE REPAIR

Not enough normal leaflet

Difficult

Valvectomy

Substantial morbidity

High risk of reinfection

Mortality

TRICUSPID VALVE REPLACEMENT
Survival Post - TV Replacement for Endocarditis

Biological and Mechanical Protheses

Repair vs Replacement Survival

20% Mo.

<table>
<thead>
<tr>
<th>Years</th>
<th>Repair</th>
<th>Replacement</th>
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</thead>
<tbody>
<tr>
<td>1-year</td>
<td>82.0%</td>
<td>82.6%</td>
</tr>
<tr>
<td>5-year</td>
<td>65.7%</td>
<td>65.3%</td>
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Tricuspid Valve Replacement

Decreased risk of recurrent TR

Increased risk of thromboembolic complications (especially mechanical)
PERICARDIAL PATCH REPAIR
Complex tricuspid valve repair after endocarditis
• January 2010 a October 2018 → 2423
• n= 43
Complex Tricuspid Valve REDO
SIMPLE EXCISION OF THE VEGETATION
THANK YOU

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