Aortic Valve Sparing Root Replacement in Acute Type A Aortic Dissection

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Author Disclosures

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Options for Aortic Root for Acute Type A Dissection

- Aortic valve resuspension
- Mechanical composite conduit
- Biologic Bentall procedure
- Valve sparing aortic root replacement
International Registry of Acute Dissection

• 1995 patients with acute type A dissection

• 35% underwent root replacement

• No difference in hospital or 3 year mortality rates

International Registry of Acute Dissection

• No difference in 3 year mortality

• No difference in 3 year freedom from proximal reintervention
  
Leipzig Experience

- 208 of 374 patients had root procedure
  - Bentall 130 patients
  - Yacoub 51 patients
  - David 27 patients
- Midterm followup suggested no difference in durability

*Subramanian et. al Ann Thorac. Surg. 2012*
Emory Experience

- 43 of 350 patients underwent David V for acute type A dissection
- 51% with 3+ or more AI
- 4.7% mortality
- Last followup 2/35 had mild or less AI

Patient KW

- 56 year old with negative family history and Marfan features presented with 4 days of back pain
Patient KW Intraoperative Course
KW—Intraoperative Echocardiogram
KW—Predischarge CT scan

- Discharged POD 15
- RV dysfunction treated with milrinone for 3 days
Summary and Conclusion

Valve sparing root procedures are feasible in acute type A dissection with similar mortality rates and mid term durability at high volume centers but long term comparative data against conventional procedures are still needed.