


USE OF TEVARs FOR TBAD IN PATIENTS WITH CONNECTIVE TISSUE DISEASE : WHEN SHOULD THEY BE DONE ? HOW DURABLE ARE THEY ? WHEN ARE OPEN REPAIRS BETTER ?

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Disclosures

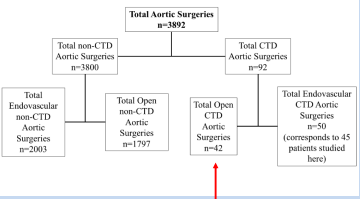
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Introduction

- Open aortic repair (OAR) is the gold standard for connective tissue disease (CTD) patients with aortic pathology.
- CTD patients undergoing OAR have mortality rates of ~5-15% and 5-year survival of ~50-60% even at centers of excellence.
- Clinical guidelines recommend *against* endovascular aortic repair (EAR) in CTD patients, despite lack of Level I evidence.
- **Objective : UF retrospective analysis of outcomes of consecutive EAR in CTD patients 2005 - 2023**

UF AORTIC CENTER 17 yr experience



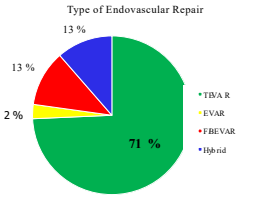
UF EAR cohort n = 45 patients

Mean age 49 yo
M / F 62 / 38 %
Race 22% nonwhite
CTD : 84% Marfan, 9% Ehlers- Danlos, 3 other
Urgent / emergent 69%, ED or transfer 62%
Prior aortic tx 78%, 2 + previous aortic tx 29%
Ruptured 9%, symptomatic 60%
Mean aortic diameter 59 mm
Dissection 80% A 18%, B 62%, acute 33%
Aneurysm 89%

Mainly younger pts, elective presentations, TAAA

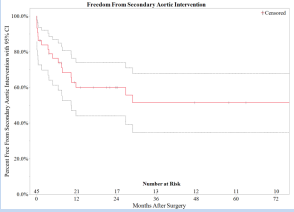
Older, more comorbidities, prior aortic tx, urgent presentations + dissection

TREATMENT / FOLLOW-UP



- **Mean Follow-up Time = 41 months (IQR 15, 114 mo)**
- **Proximal landing zone :** Native aorta 44 % , surgical graft 56 %
- **Periop Complications :** Endoleak 20 % , respiratory failure 7 % , aortic rupture 4 %
30 day mortality : 7 %
- **Secondary intervention 47 % (mean number 1.8)**
- **Mean time to 2nd tx : 21 months**
- **2nd tx < 30 days : 13 %**
- **Secondary intervention open 57 % , endo 43 %**
- **Urgent 55 % , elective 45 %**

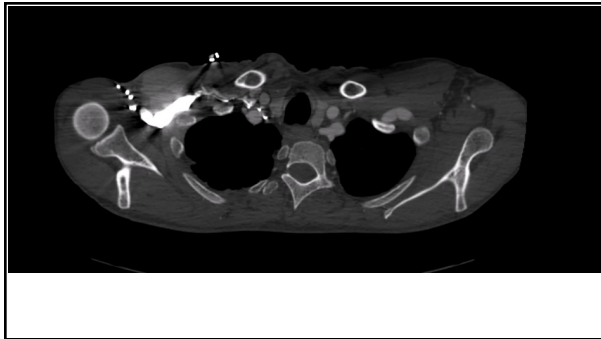
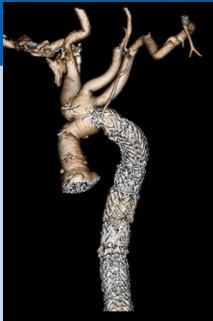
SECONDARY INTERVENTIONS



Recent case - 52 yo M with Marfans

- 2006 Emergent type A, open arch recon/hemiarch
- 2007 TEVAR
- 2014 Open aorto bi iliac with RIIA limb
- 2024 New prox IR aortic anast aneurysm + R IIA limb occlusion, new L CIA anast aneurysm with chest / abd pain

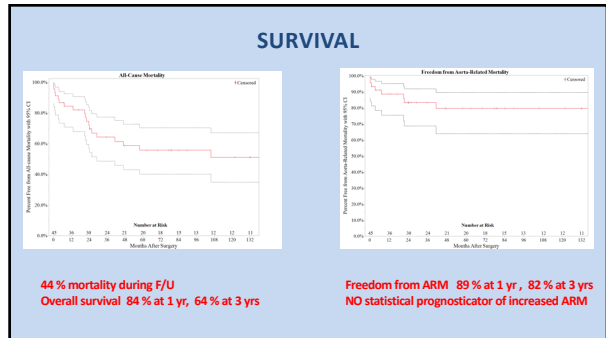
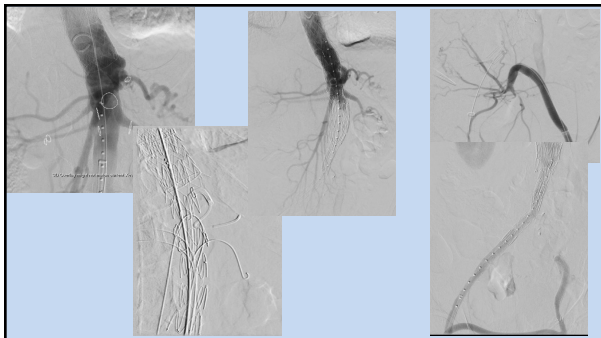
SAI within 30 days index EAR = 13 % (29% of SAI)
Mean survival post SAI = 22 months
Freedom from SAI 60 % at 1 yr and 51 % at 3 yrs

Stable ascending / arch open repair and TEVAR of DTA

Plan →

- FEVAR with 5 visceral vessel (2 R renals) bridging stents
- Distal AUI to R iliac limb (IIA occluded)
- L iliac limb embolization plug
- L EIA to IIA retrograde endograft for hypogastric preservation
- R to L cross femoral artery bypass



CONCLUSIONS

- **Endovascular repair has a selected role in treatment of aortic dissections & aneurysms with CTD patients**
- Targeted endovascular repair for higher risk CTD patients, emergent presentations and desc thoracic aorta pathology with TEVAR
- Lower aortic related mortality is achievable but stringent surveillance is needed as secondary interventions are frequent and multiple aortic / branch interventions are expected in CTD patients (total aortic replacement)