



One-stage vs. two-stage open repair of type II TAAA

D. Kotelis

Disclosure

Speaker name:

.....

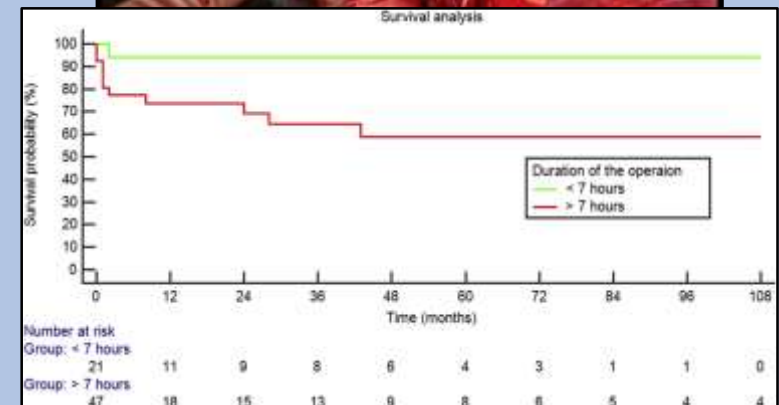
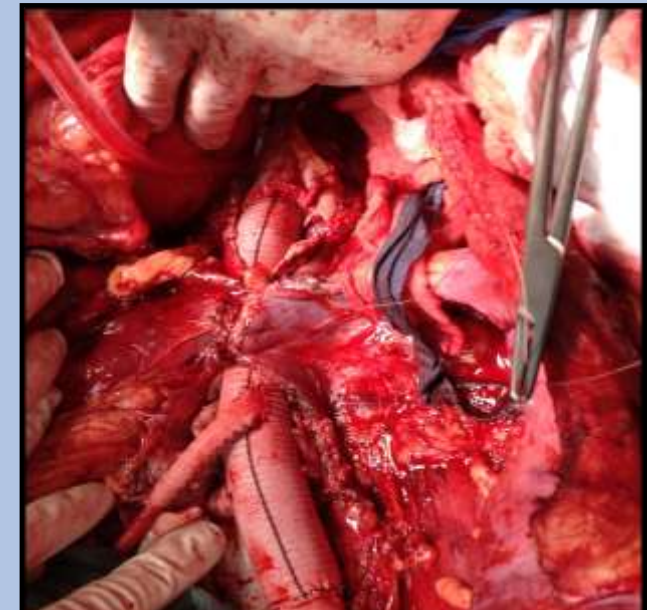
I have the following potential conflicts of interest to report:

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

- I do not have any potential conflict of interest

Background

- Open type II TAAA repair → high morbidity and mortality
- “Staging” associated with decreased spinal cord ischemia
- Operative time risk factor for adverse events
- Comparative data scarce



Coselli et al. JTCVS 2016

Etz et al. JTCVS 2010

Keschenau, Kotelis et al. EJVES 2017

Aim of the study

- To compare one- vs. two-stage open type II TAAA repair
 - Two-stage approach as a primary operative strategy
 - Max. 6 months between the two stages
 - No progressive disease included

Demographics and underlying disease

Factor	Total (n = 71) n (%)	One-stage repair (n = 55) n (%)	Two-stage repair (n= 16) n (%)	p-value
Age (years, median [range])	58.5 (23-77)	60 (23-77)	51.5 (29-70)	0.068
Sex (female)	18 (25.4)	15 (27.3)	3 (19)	.37
ASA (median)	3 ± 0.7	3 ± 0,7	3	0.46
Mean aortic diameter (mm, median, [range] mean, SD)	65 (49-140)	65 (49-140)	67.5 (55-90)	0.736
Degenerative aneurysm	22 (30.1)	39 (71)	11 (69)	.003
Type B dissection	25 (38)	10 (18)	3 (19)	<.001
Prior open ascending aorta or arch repair	20 (28.2)	15 (27.3)	5 (28)	0.759

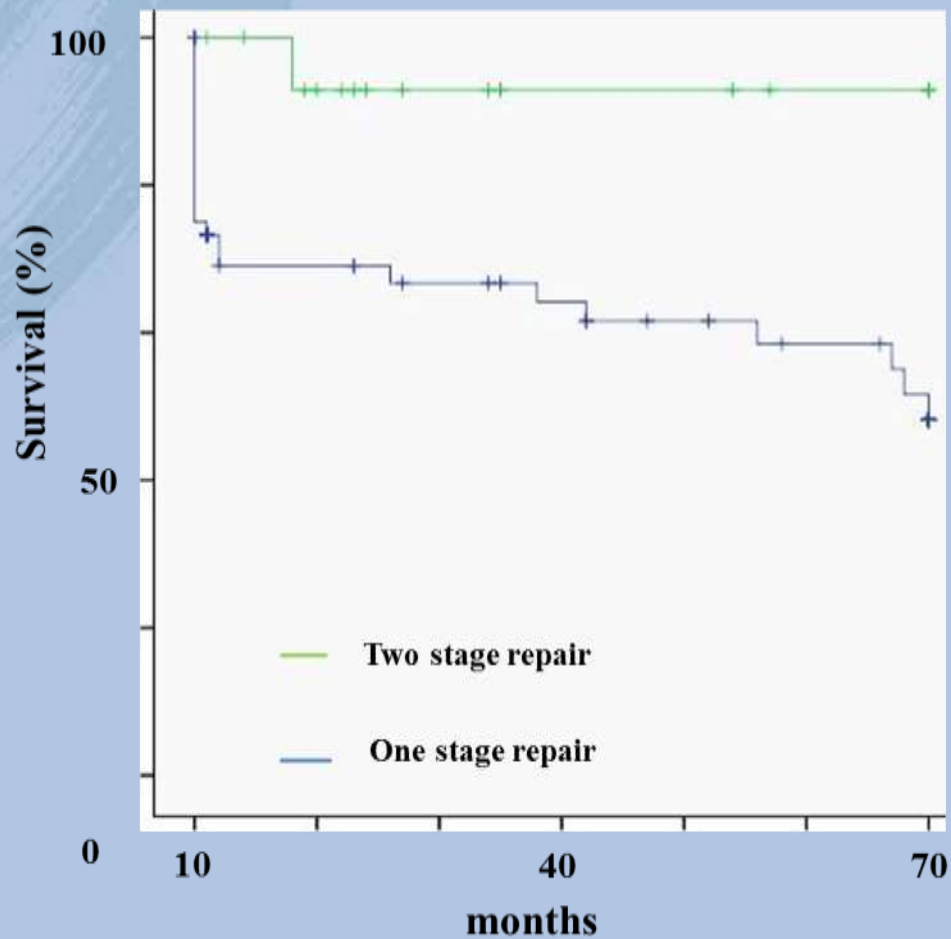
Procedural details

Factor	Total (n = 71)	One-stage repair (n = 55)	Two-stage repair (n= 16)	P- Value
Procedure time (min, median [range])	493 [254-893]	451 [254-860]	655 [429-893]	<0.001
Ventilation time (min, median [range])	146 [2-1564]	251 [2-1537]	320 [7-1570]	0.54
Stay on ICU (days, median [range])	13 [2-69]	13.5 [2-69]	12 [2-49]	0.82
In-hospital stay (days, median [range])	30, [11-129]	26.5 [11-129]	42 [26-108]	<0.001

Results

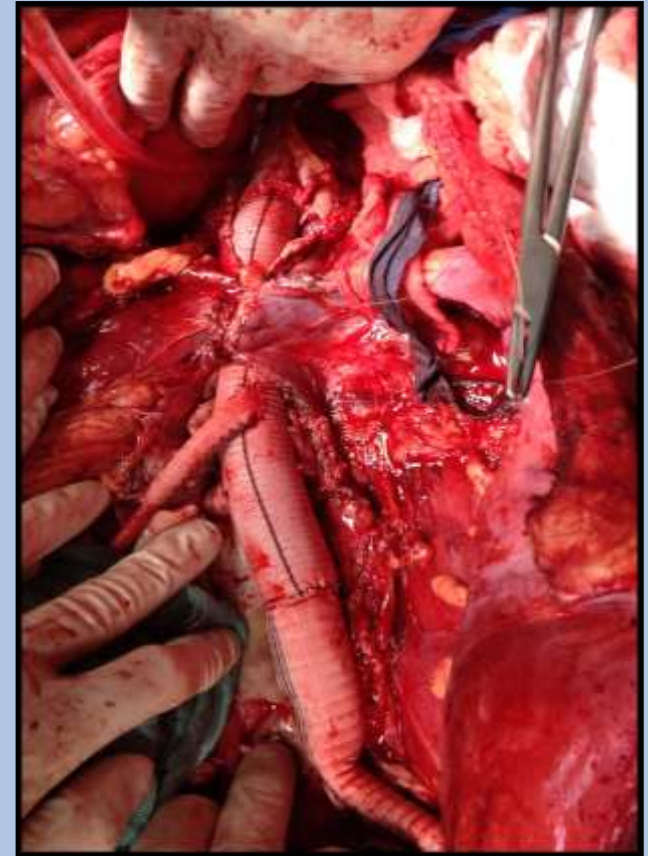
Factor	Total (n = 71) n (%)	One-stage repair (n = 55) n (%)	Two-stage repair (n= 16) n (%)	P-Value
In hospital mortality	12 (16.9)	12 (21.8)	0	.05
One-year survival rate	58 (81.6)	42 (76.3)	16 (100)	.031
Long-term survival (mean: 42 months)	51 (71.8)	35 (63.6)	16 (100)	.0017
Paraplegia	5 (7)	5 (9)	0	.58
Paraparesis	6 (8.4)	6 (10.9)	0	0.32
Stroke	5 (7)	4 (7.2)	1 (6.25)	1
AKI req. permanent dialysis	3 (4.2)	3 (5.4)	0	1.0
Sepsis	8 (11.2)	6 (10.9)	2 (12.5)	0.41
Myocardial infarction	4 (5.6)	4 (7.2)	0	.57

One vs. two-stage repair



Conclusions

- Two-stage type II TAAA repair shows lower M&M compared to one-stage repair
- Preferable open treatment if anatomically feasible





One-stage vs. two-stage open repair of type II TAAA

D. Kotelis