

Repair of Type III TAAA and aortoiliac occlusion

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PMH

54 yo male

TAAA- 10 cm



200 mm

PMH

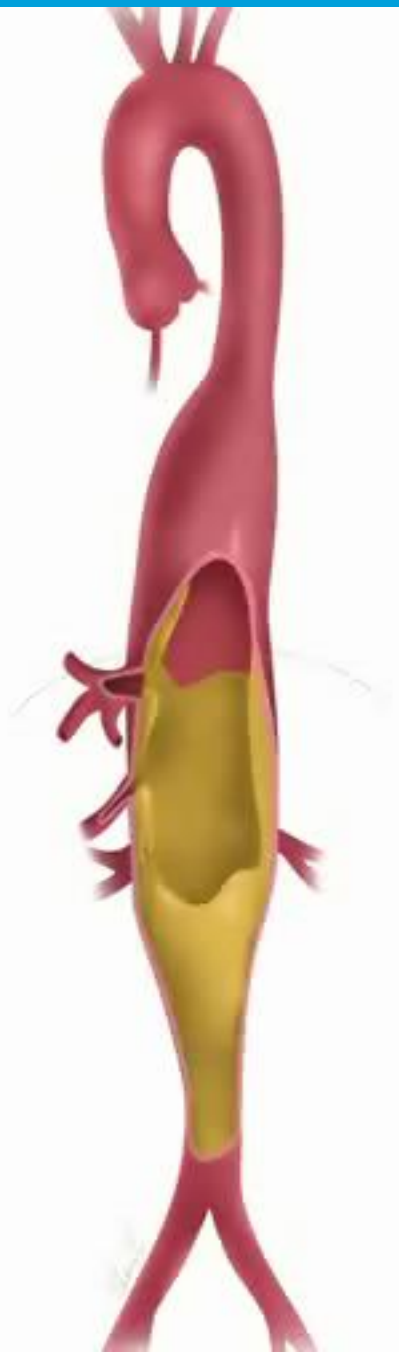
- Right renal artery stenosis
- Left renal artery occlusion
- Occluded infrarenal aorta
- Occluded aortobifemoral grafts
- Chronic kidney disease
- Ejection Fraction = 30%

What is next?

- Medical Management?
- Palliative care consult?
- Surgery for TAAA?
- What about the infrarenal occlusion?
 - Do an axillo-bifemoral bypass first?

Procedure

- Type 3 TAAA repair
- Descending aorta replacement
- Reimplantation of Celiac, SMA and Right Renal Artery
- Descending graft to-
 - Right Common Femoral Artery Bypass
 - Left Femoral Artery Bypass
- Reimplantation of T9 pair of intercostal arteries





Postoperative Course

- Postoperatively he developed AKI
- Required temporary hemodialysis
- Discharged home on postoperative day 20

Thoracoabdominal Aneurysms

2000 – 2016

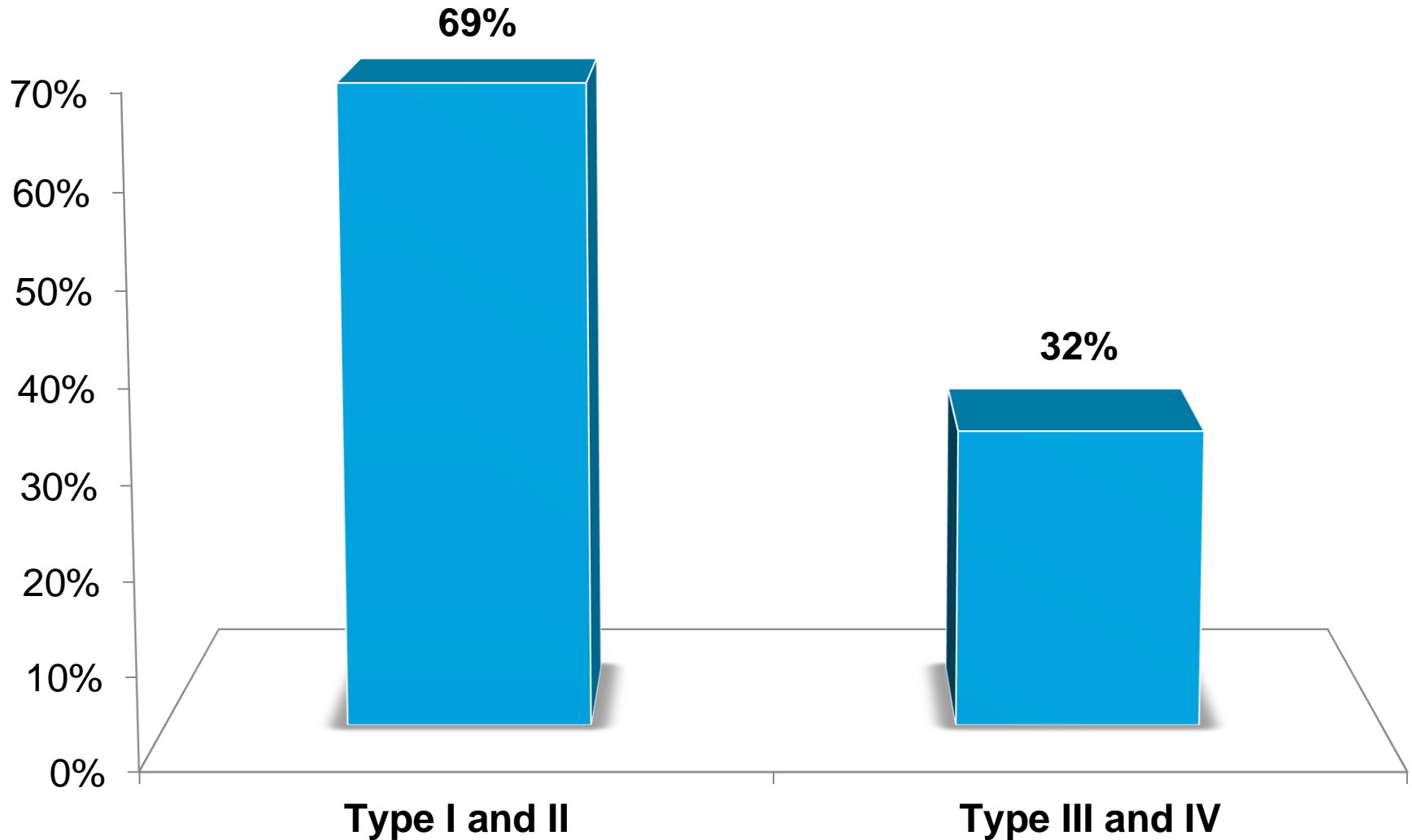
(n=244)

Male 155 (63%)

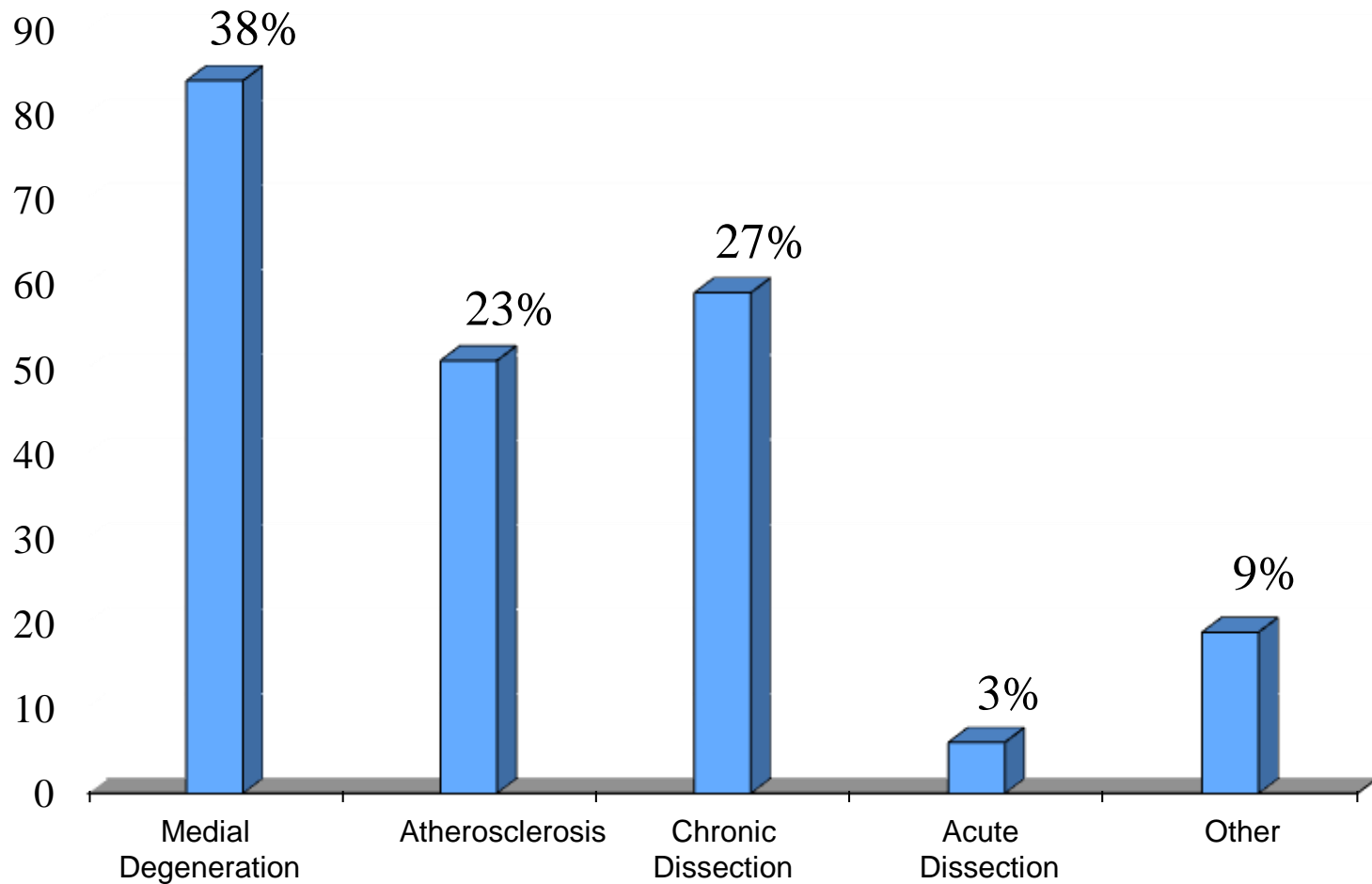
Female 89 (37%)

Age (mean \pm) 62 \pm 13

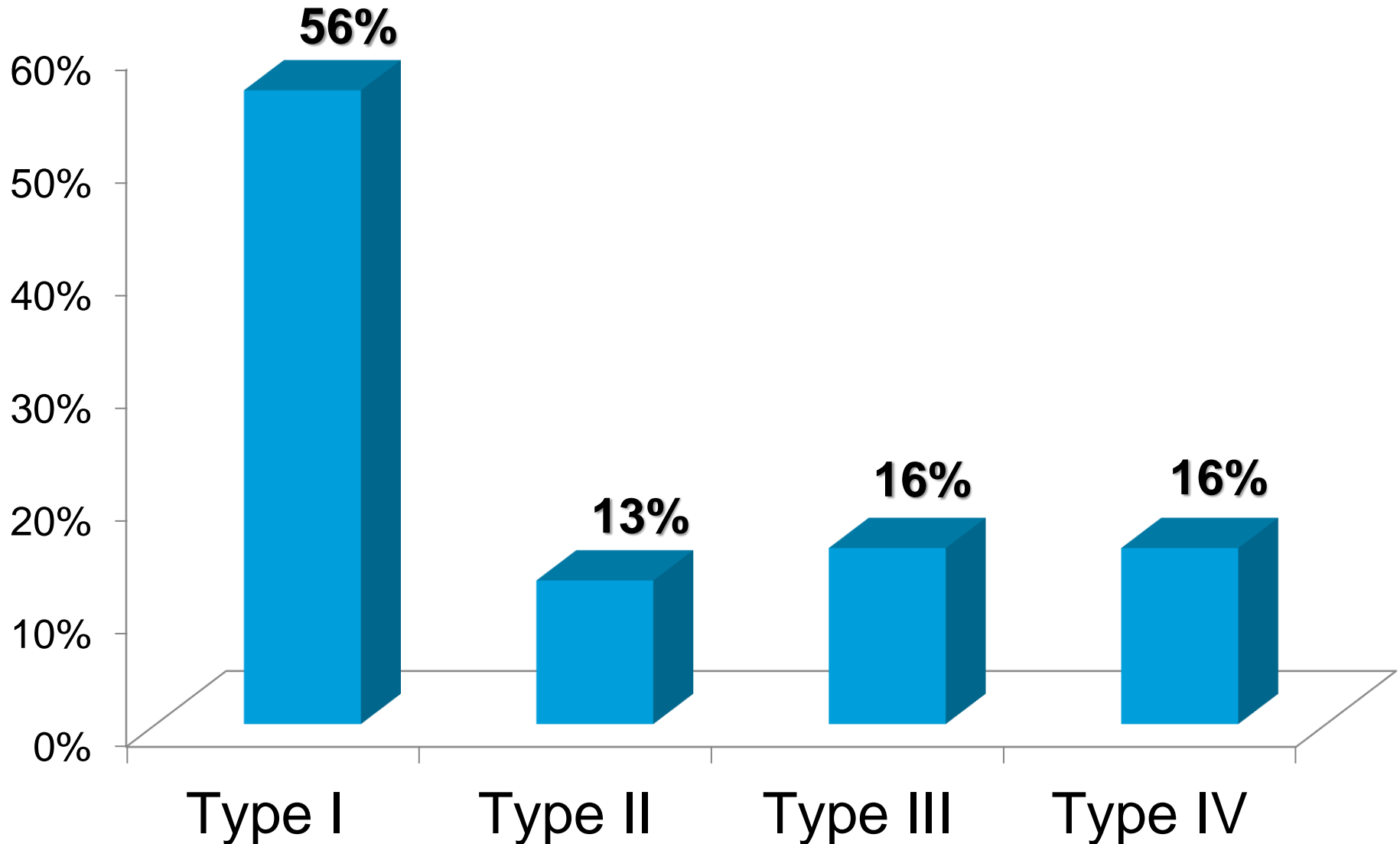
Aneurysm Type: (n=244)



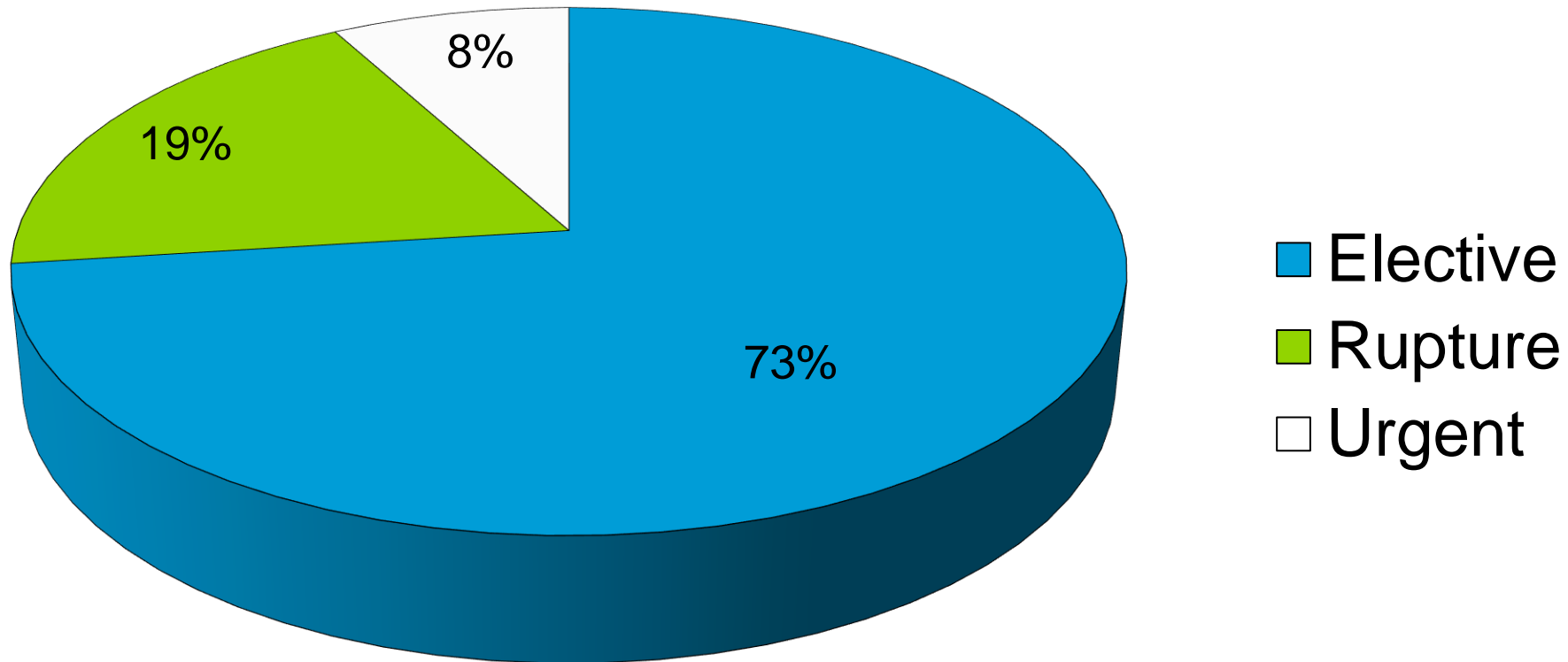
Etiology: (n=244)



Aneurysm Type: (n=244)



Presentation: (n=244)



Distal Perfusion

- No Distal perfusion 49 (20%)
- Femoral-Femoral 122 (50%)
- Atrial-Femoral 73 (30%)
- DHCA 61 (25%)

Operative results

- Aortic X time 51 ± 21
- CPB time 101 ± 87
- DHCA time 28 ± 8

Morbidity and Mortality

Mortality 13 (5.5%)

Paraplegia 4 (1.7%)

New Onset Renal Complications: Creatinine >2.5

- New onset renal insufficiency 25 (10%)
- New Onset Hemodialysis 8 (3.5%)
- Ventilation >48h 93 (38%)

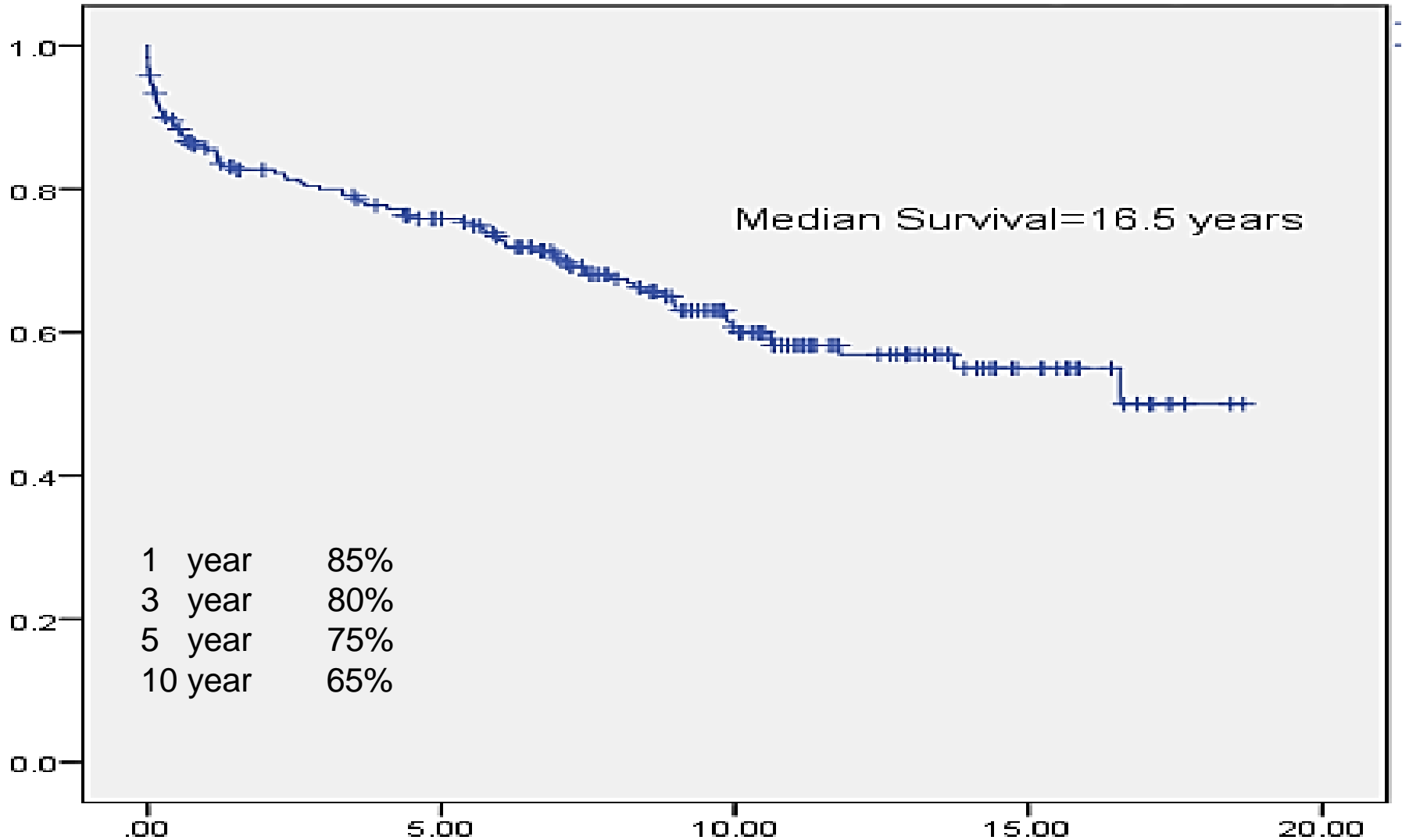
Operative Complications

- Post - Op Bleeding 8 (3%)
- Stroke 6 (2.5%)
 - Embolic 3
 - Hemorrhagic 3

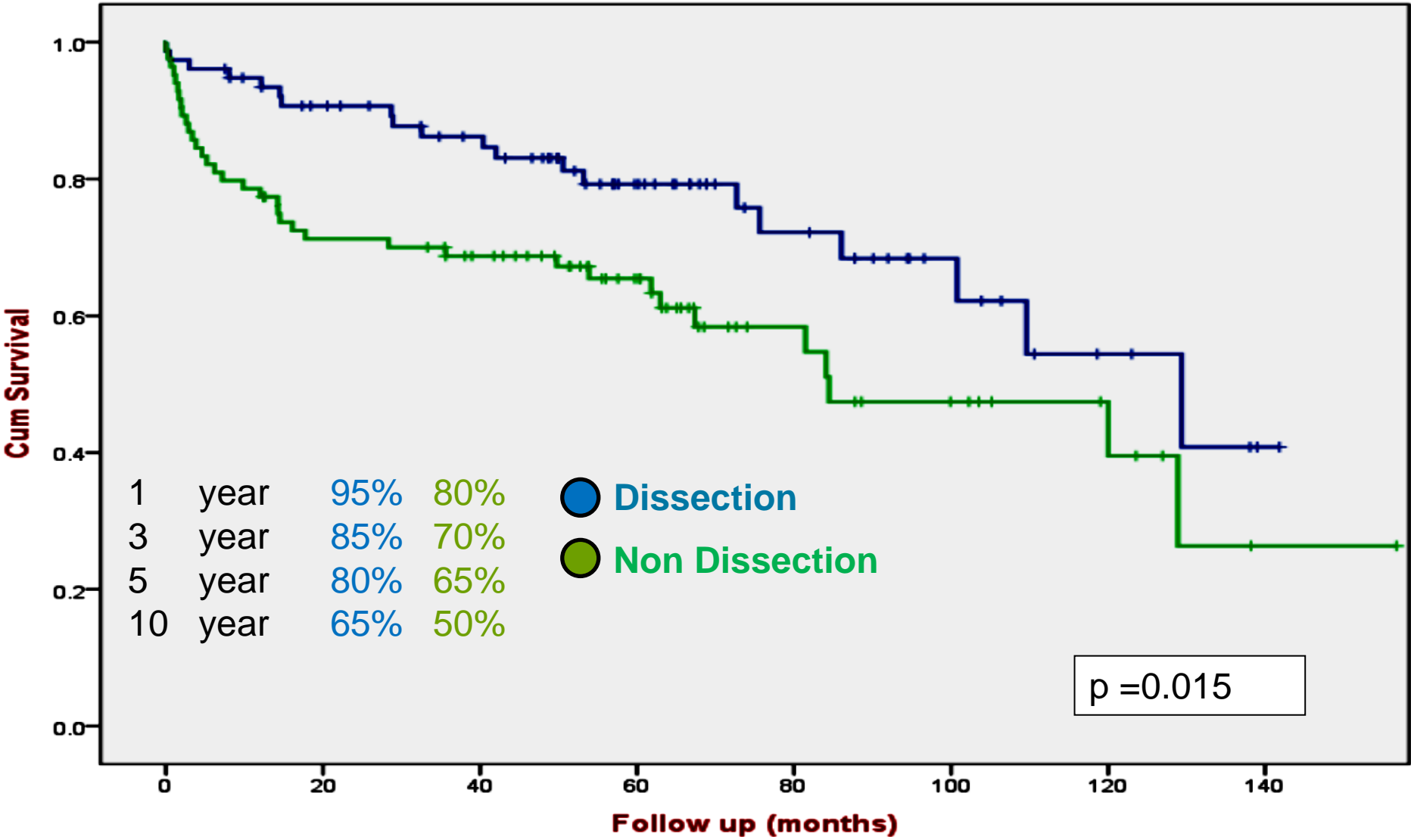
Hospital Stay

Days (Mean \pm SD) 17 \pm 18

Survival



Survival and Dissection



Demographics

	Plestis 2017 (n=244)	Schepens 2010 (n=258)	Gambria 2002 (n=337)	Coselli 2016 (n=3309)	Conrad 2007 (n=445)
Age	66	65	70	67	71
Extent I + II	69%	58%	44%	60%	42%
Rupture	19%	15%	13%	5.1%	11%

Outcomes

	Plestis 2017 (n=244)	Schepens 2010 (n=258)	Gambria 2002 (n=337)	Coselli 2016 (n=3309)	Conrad 2007 (n=445)
Mortality	6%	10%	8%	7.2%	8%
SCI*	2%	11%	9.6%	3%	13%
Dialysis	4%	10%	13%	7.6%	21%

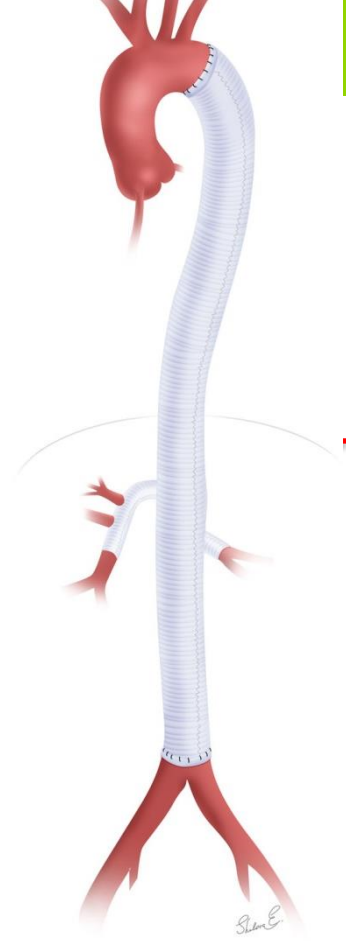
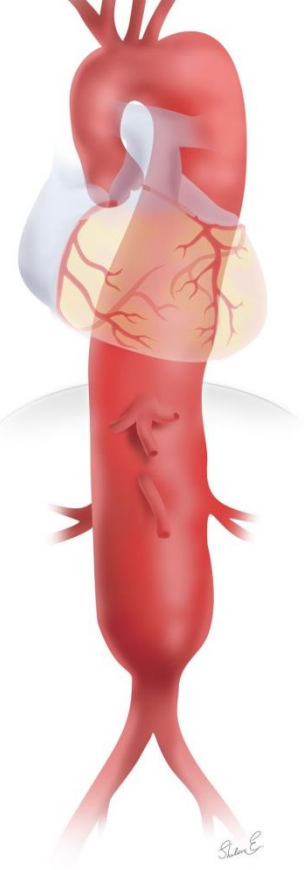
*SCI- Spinal Cord Ischemia

Survival

Survival	Plestis 2017	Schepens 2010	Conrad 2007	Coselli 2016	Kouchoukos 2011
1 year	85%	83%		83%	
5 years	80%	63%	54%	63%	55%
10 years	65%	34%	29%	37%	23%

TAAA

N=244



	All	STS
Mortality	5.5%	13.3%
Stroke	2.5%	6.9%
New onset of renal insufficiency	10%	17.9%
Reoperation	3%	16.8%

Conclusion

- Open operations in the thoracoabdominal aorta remain extremely complex
- The results of open repair of TAAA have improved significantly over the last decade in centers of excellence
- The long term outcomes of TAAA are excellent
- Open TAA repair remains the procedure of choice in appropriately selected candidates