2018 MID-ATLANTIC CONFERENCE

8th ANNUAL CURRENT CONCEPTS IN

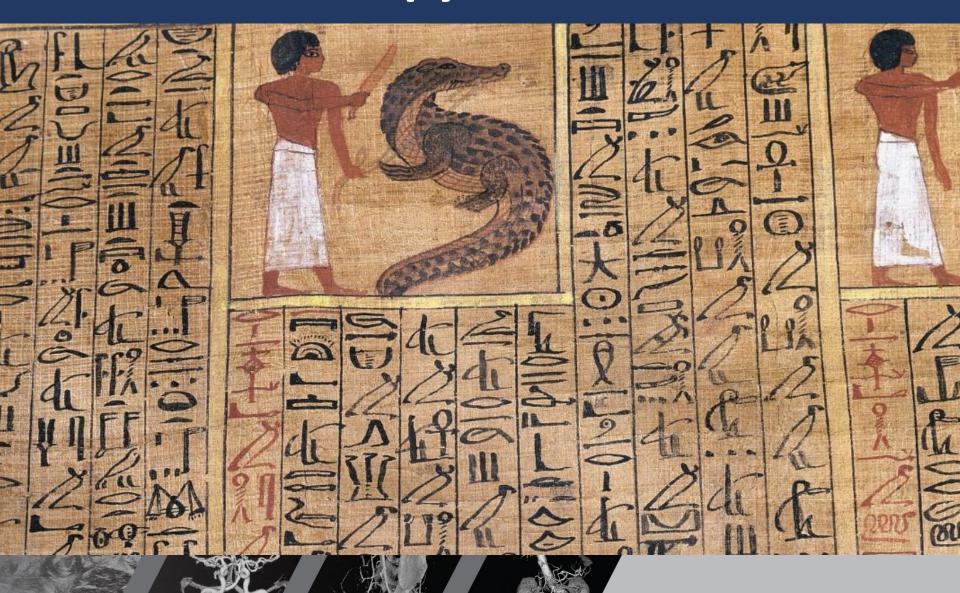
#### VASCULAR THERAPIES



Gordon K. Stokes, MD April 28,2018

Open Surgery Will Always
Have a Role in Complex Aortic Repair

# Ebers Papyrus, 2000 BC



# Antyllus The True Father of Vascular Surgery

Antyllus method

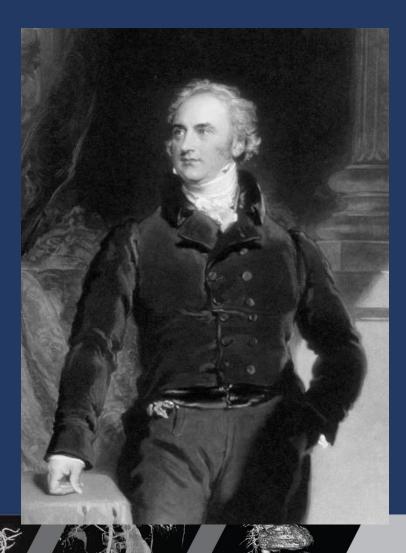
proximal and distal ligation

central incision of aneurysm

Thrombus evacuation



# Sir Astley Cooper 1817



# Sir Astley Cooper 1817



# Aneurysm Treatment Fails

Moore 1864 at Middlesex Hospital wired an aneurysm with 26 yards of coils

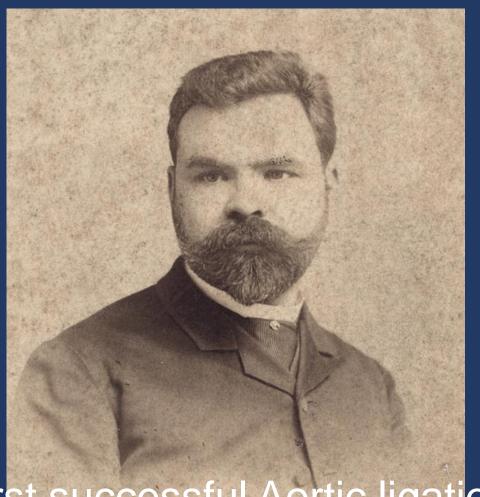


# Aneurysm Treatment Fails

Carrodi 1879 in Pavia attached the wires to a battery to induce thrombosis



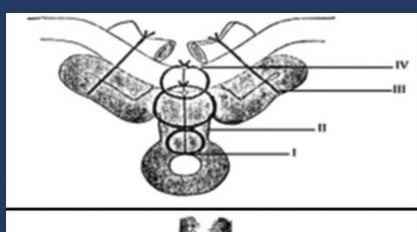
# Rudolph Matas 1923

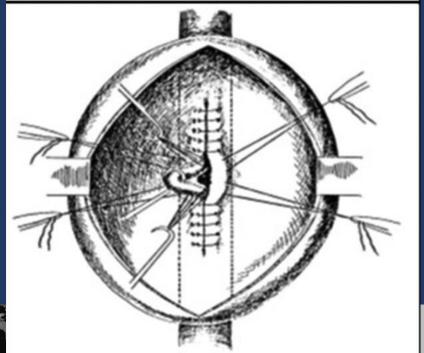


First successful Aortic ligation

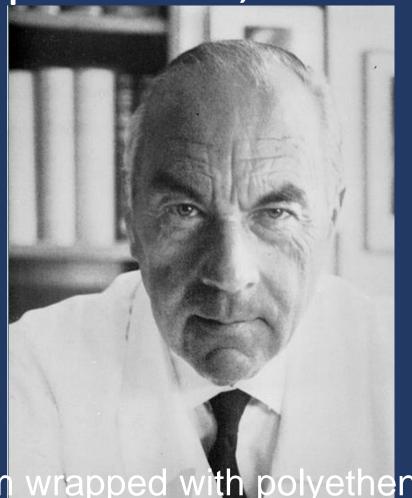
# Endoaneuryrsmorraphy

Obliterative Restorative Reconstructive

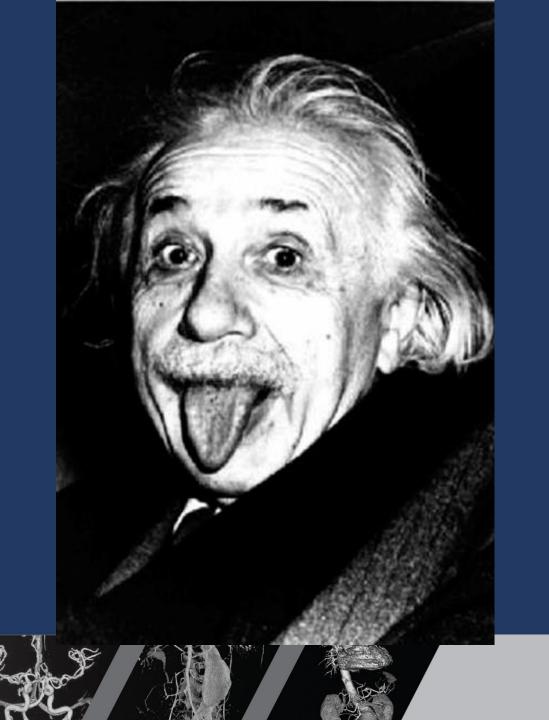




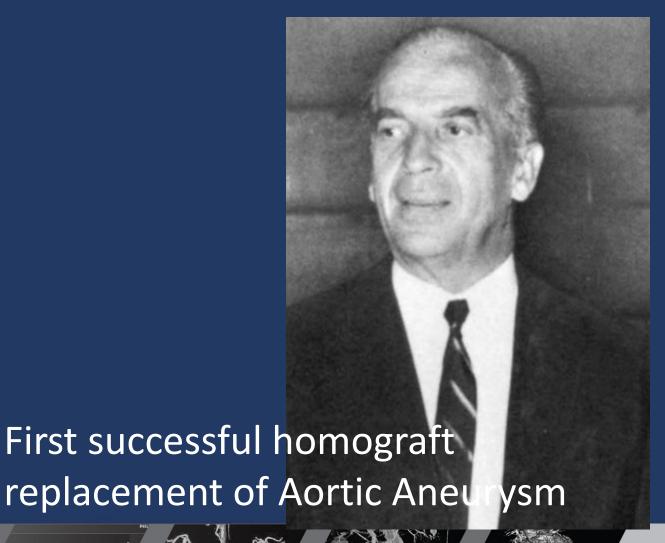
# Rudolph Nissen, M.D. 1948



Aortic Aneurysm wrapped with polyethene cellophane,19



### **Charles Dubost 1951**



# Southern Surgical Association Meeting 1952

Blakemore in New York

rubber band wrapped polythene film insertion of wire then

100 volts of electric current

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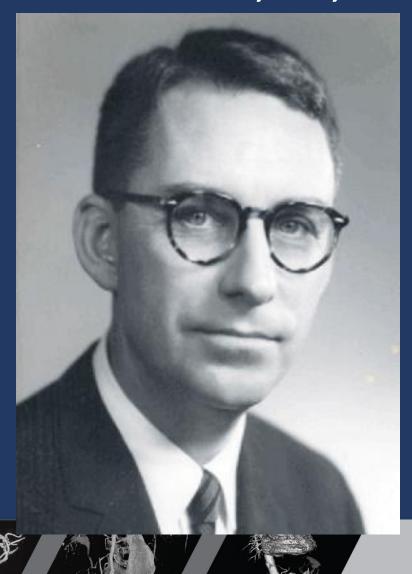
DeBakey

Two successful Homograft cases

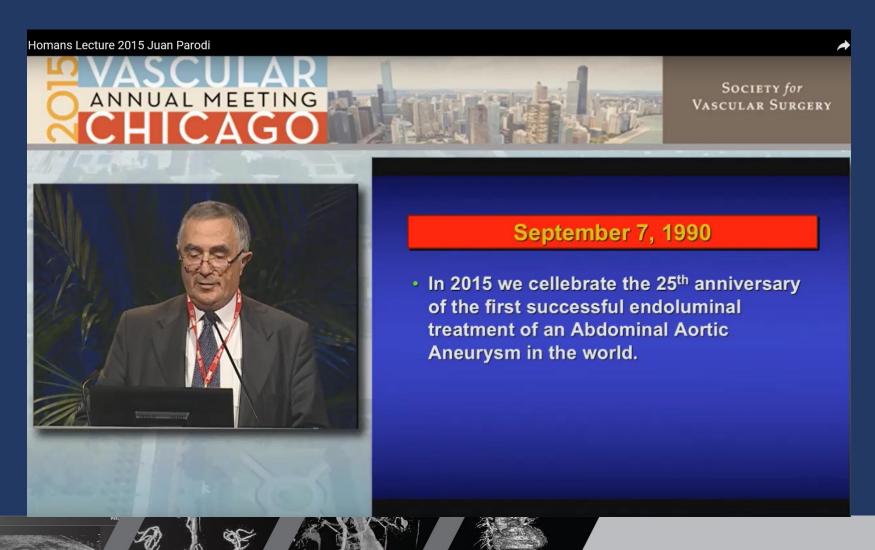
# Michael DeBakey, M.D.



# Oscar Creech, Jr., M.D.



# Juan Parody 1990



# Jean Panneton, M.D.



# Jean Panneton, M.D.



"EVAR is a failed experiment"

# Jean Panneton, M.D.



"EVAR has the most failure modes of all procedures."

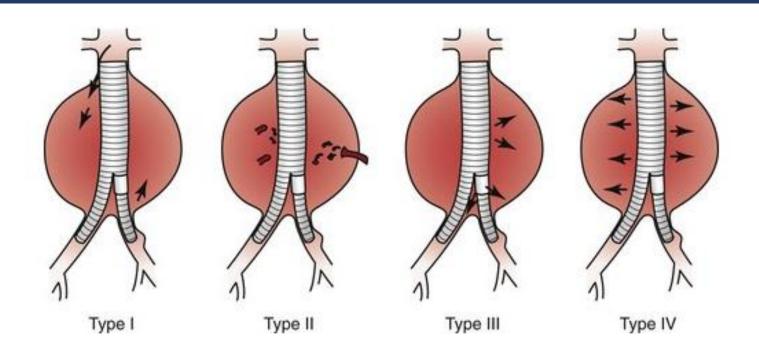
#### Modes of EVAR Failure

- Endoleak
- Endotension with no demonstrable leak
- Sac growth
- Migration
- Neck dilatation

# Modes of EVAR Failure, continued

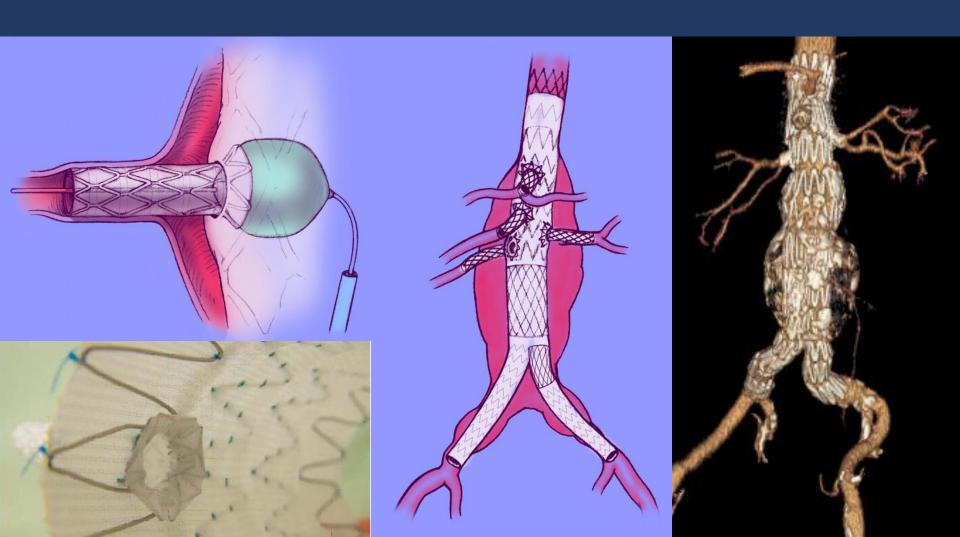
- Graft limb Occlusion
- Infection
- Stent Fracture
- Renal Artery Occlusion
- Pelvic Ischemia

# Endoleaks





# Multiple sites for Endoleaks



# Open repair versus fenestrated endovascular aneurysm repair of juxtarenal aneurysms

Rohini Rao, BSc, Tristan R. A. Lane, MRCS, Ian J. Franklin, FRCS(Gen Surg), and Alun H. Davies, DM, FRCS, London, United Kingdom

# Open repair versus fenestrated endovascular aneurysm repair of juxtarenal aneurysms

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#### Conclusions

#### **FEVAR**

Higher rate of progression to renal impairment Greater rate of secondary interventions

Lower long term survival

#### Conclusion

Open repair is the gold standard management for juxtarenal aneurysms.

#### Long-Term Outcomes of Abdominal Aortic Aneurysm in the Medicare Population

Marc L. Schermerhorn, M.D., Dominique B. Buck, M.D., A. James O'Malley, Ph.D., Thomas Curran, M.D., John C. McCallum, M.D., Jeremy Darling, B.A., and Bruce E. Landon, M.D., M.B.A.

Table 3. Eight-Year Outcomes after Endovascular and Open Repair of Abdominal Aortic Aneurysm.					
Outcome	Endovascular Repair (N=39,966)	Open Repair (N=39,966)	P Value		
	no. of patients (%)*				
Death	14,548 (54.9)	14,681 (54.7)	0.76		
Rupture of aneurysm	962 (5.4)	353 (1.4)	<0.001		
Any aneurysm-related intervention	4,165 (18.8)	754 (3.7)	<0.001		
Major reintervention	392 (2.3)	186 (0.8)	<0.001		
Minor reintervention	3,924 (17.5)	597 (3.1)	<0.001		
Minor reintervention for embolization	1,857 (8.0)	161 (1.0)	<0.001		
Hospitalization for abdominal aortic aneurysm without reintervention	233 (1.2)	55 (0.3)	<0.001		
Reintervention for complications related to laparotomy	1,695 (8.2)	4,427 (17.7)	<0.001		
Repair of a hernia of the abdominal wall	610 (2.7)	3,070 (11.2)	<0.001		
Lysis of adhesions without bowel resection	238 (1.4)	654 (3.1)	<0.001		
Bowel resection	1,035 (5.2)	1,199 (6.0)	0.008		
Admission for bowel obstruction without surgery	3,510 (17.3)	4,805 (22.2)	<0.001		
Aneurysm-related intervention or intervention for compli- cations related to laparotomy	5,614 (25.1)	5,034 (20.6)	<0.001		
Hospitalization related to aneurysm or for complications related to laparotomy, without intervention	3,710 (17.9)	4,846 (22.0)	<0.001		
Reintervention or hospitalization without intervention for rupture, aneurysm, or complications related to laparotomy	6,279 (27.8)	5,355 (21.8)	<0.001		

<sup>\*</sup> Percentages are 8-year Kaplan-Meier estimates.

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	Endovascular	Open	
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#### What is Success?

#### **Definition of SUCCESS**

- 1 obsolete : OUTCOME, RESULT
- a : degree or measure of succeeding
  - **b** : favorable or desired outcome; also : the attainment of wealth, favor, or eminence
- 3 : one that succeeds

### Definition of Success

#### Spiritual teacher Deepak Chopra believes success is a matter of constant growth.

The physician and author says it's a matter of continual growth.

"Success in life could be defined as the continued expansion of happiness and the progressive realization of worthy goals," Chopra writes in "The Seven Spiritual Laws of Success."



Amy Sussman /AP Images for Seventh Generation

### What is Success?

- Safe
- Effective
- Durable

# Success

- Safe
- Effective
- Durable



