


Short and Long-term Results for Endovascular Therapy for Infected Aortic Aneurysm at Various Levels

An 18-year, 175-case Experience:

EVAR Can Work

Boonprasit Kritpracha, MD, Wittawat Tantarattanapong, MD
 Pong Juntarapatin, MD, Sorrascha Rookapan, MD
 Supong Warathanmanon, MD, Pitikom Brianakkawanich, MD



1

Disclosure

- None



2

Endovascular Therapy for Infected Aortic Aneurysm

Several reports/reviews, past 10+ years


Endovascular therapy for infected aortic

Good short-term & mid-term results

Long-term results
Recurrent rates

Myerle Aneurysm Aortic Repair with Endovascular Stents
 The feasibility of a strategy in treating
 Early and Late Open Aneurysm Repair for Aortic and/or Iliac A

Systematic Review
 Karl Strohmer, Jacob Buzza
 Department of Hospital Services, St



3

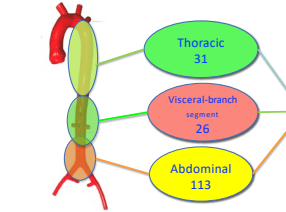

Endovascular Therapy for Infected Aortic Aneurysm

September 2005 – May 2024

175 cases: 142 males, 33 females
 Average age 64.8 years (39-90)

Thoracic 31
 Visceral-branch segment 26
 Abdominal 113

Multiple levels 5

4

Infected Aortic Aneurysm

PSU's rationale

Fever, abdominal/chest pain, ↑ WBC, ESR, CRP, ⊕ blood culture
 Characteristic findings on CT study

No Antibiotics

T/EVAR Leakage – Emergency
 No leakage – Urgency

Pain: Immediately improved
 Fever: subsided within 3-5 days

Re-evaluation


Persisted fever / pain
 - ↑ antibiotics regimen
 - ↑ interventional collection

Need for conversion

Oral Antibiotics
 Lifelong

Organisms

Salmonella	26%
MSSA	21%
Streptococcal spp.	17%
Burkholderia pseudomallei	10%
E. Coli	8%
TS	5%
Klebsiella spp.	3%
Corynebacterium Stratum	2%
Neisseria spp.	2%



5

Endovascular Therapy for Infected Aortic Aneurysm

Total 175 cases

Non-fistula group 150 (86%)

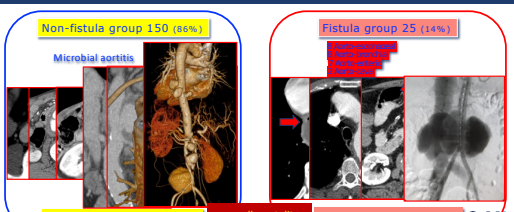

Fistula group 25 (14%)

Microbial aortitis

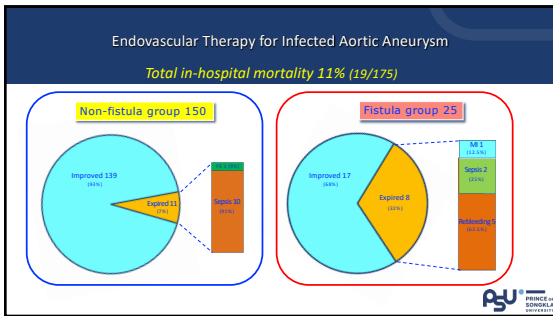
In hospital MR 7% (11/150)

overall mortality 11% (19/175)

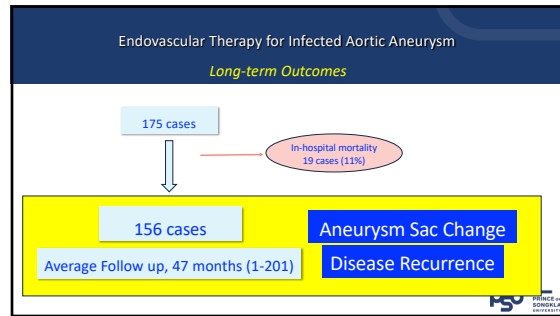
In hospital MR 32% (8/25)

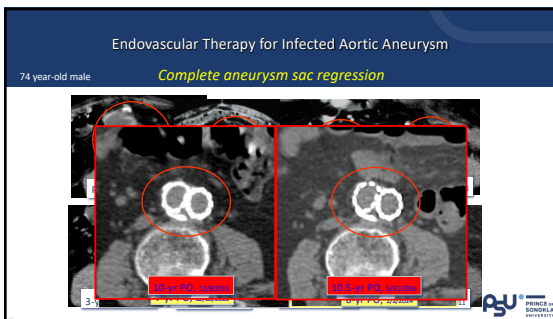
6



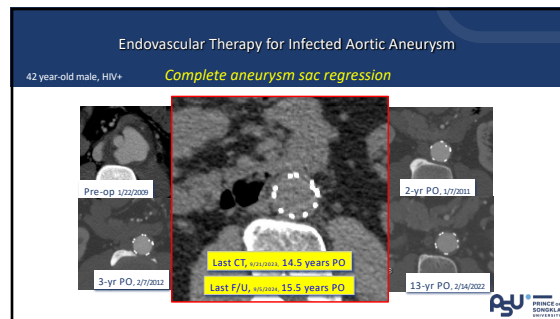
7



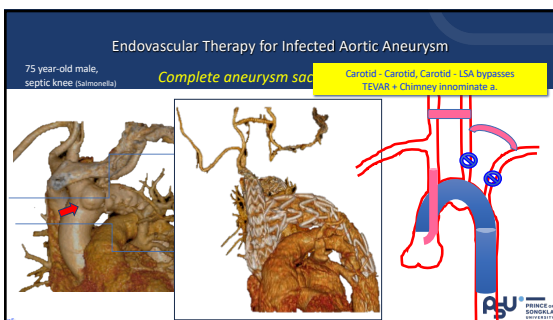
8



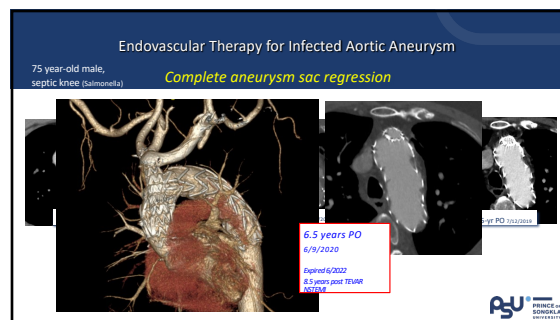
9



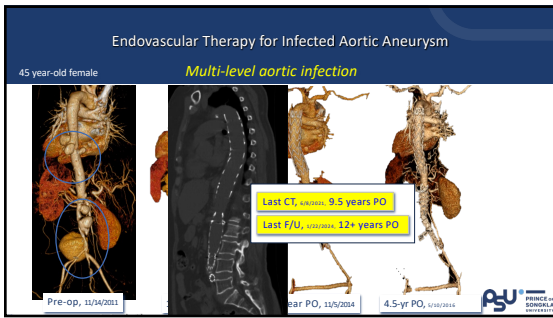
10



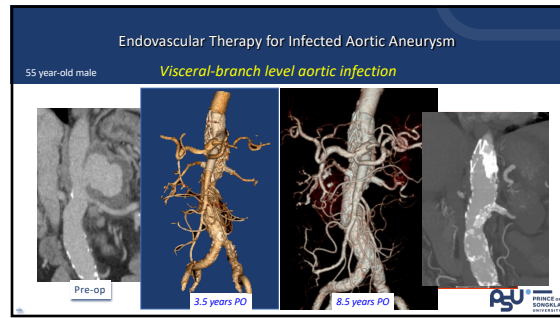
11



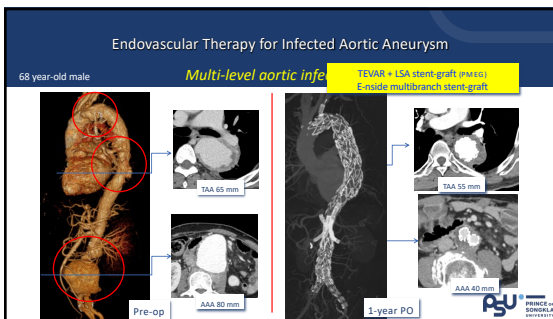
12



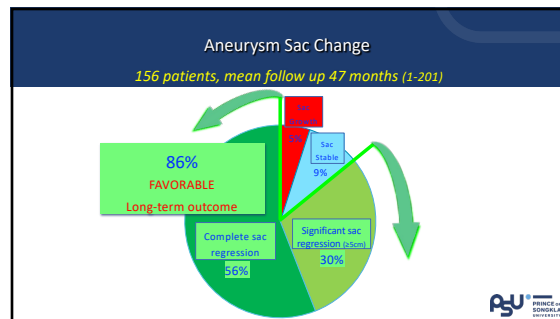
13



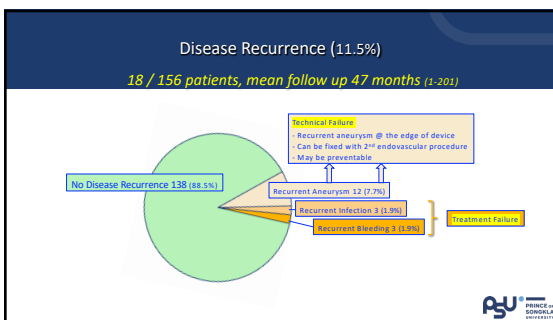
14



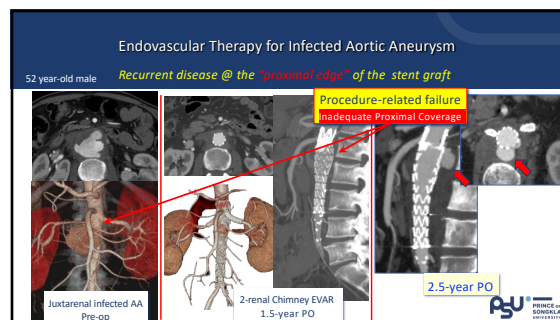
15



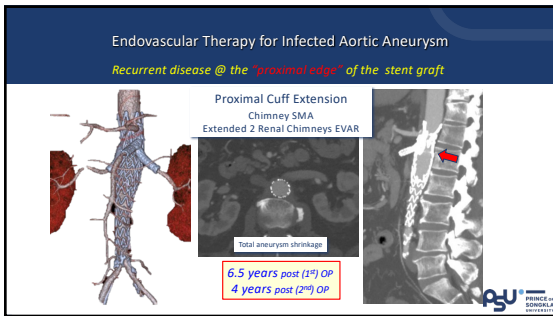
16



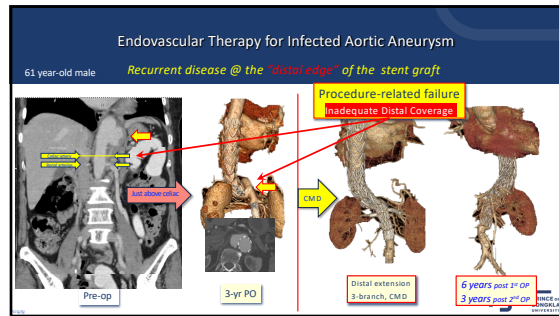
17



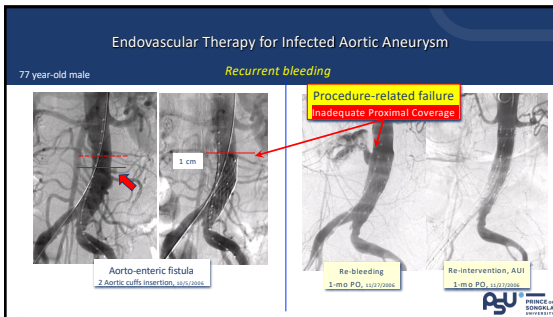
18



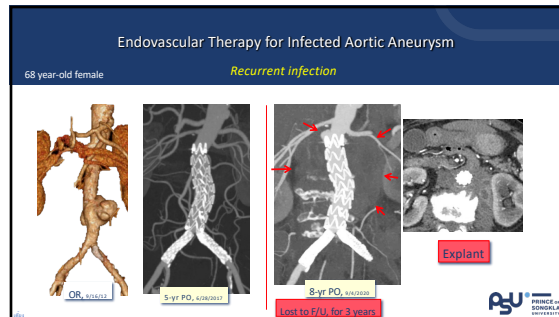
19



20



21



22

CONCLUSIONS

- Endovascular therapy + Long-term (life-long) antibiotics is an effective treatment for patients with infected aortic aneurysm, both --
 - Short-term:** particularly in "non-fistula" cases (in-hospital MR 7%)
 - Long-term:** average f/u 47 months (1-201), 156 cases
 - Good clinical outcomes (88.5%)
 - Good imaging study outcomes (total aneurysm collapse / significant shrinkage) (86%)
- 2 types of failure (11.5%):
 - Procedure-related (Technical) -- majority (7.7%), preventable
 - Infection-related -- serious but not common (1.9% each)
- Adequate coverage both proximal and distal aorta is important.

23



24