

What is the best way to manage juxtarenal AAA – fenestrate, chimney or open?

S.R.Vallabhaneni

Institute of ageing and Chronic Disease
University of Liverpool;
Royal Liverpool University Hospital

Disclosure

- CI of BSET-GLOBALSTAR Registry that received unrestricted research grants from Cook Medical and Vascutek (now Terumo Aortic)
- Consultancy, conference travel from industry >5 years ago
- No part of presentation is meant to be a product endorsement. Always refer to IFU

What is the best way to manage juxtarenal AAA ?

- What is a juxtarenal aneurysm ?
- What ways to manage ?
- How can we tell ?

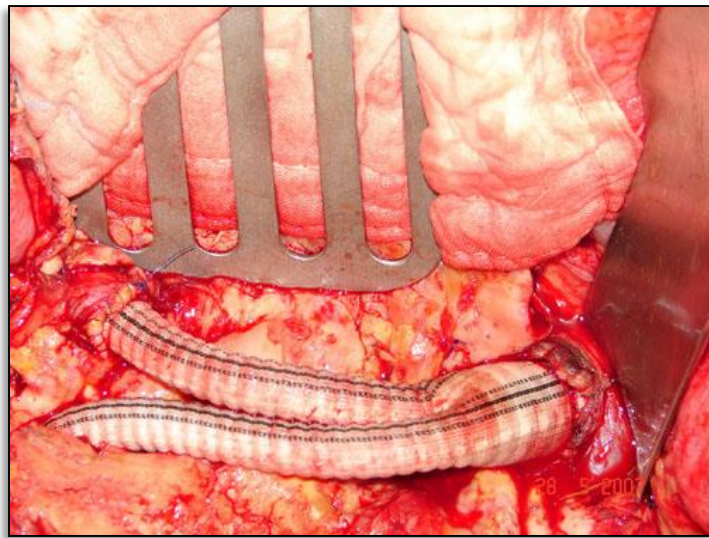
Juxta = close to

- AAA with neck shorter than 10mm
- AAA with neck unsuitable for standard EVAR (according to IFU)

No Operation !

- Rupture is not inevitable
- Operative mortality
- ?Incremental survival benefit

Open repair



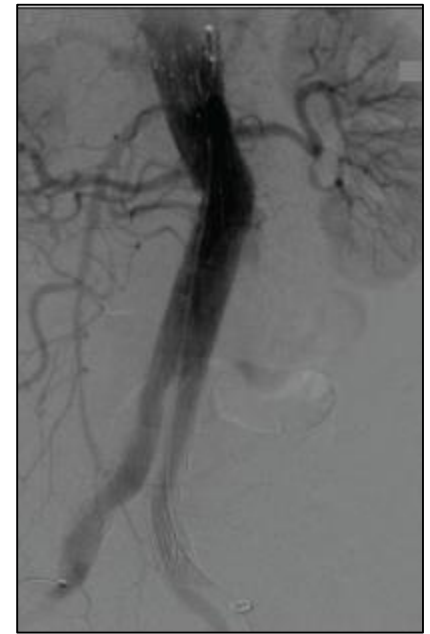
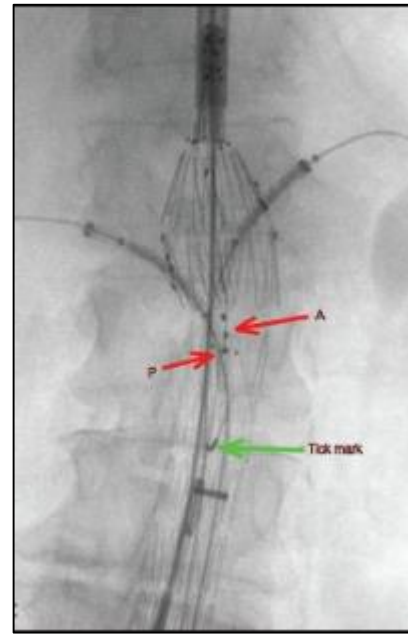
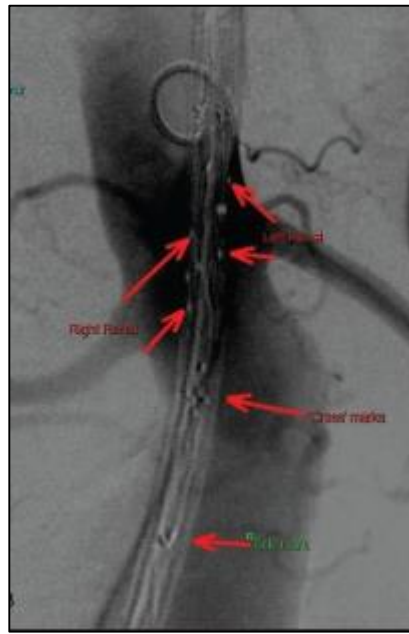
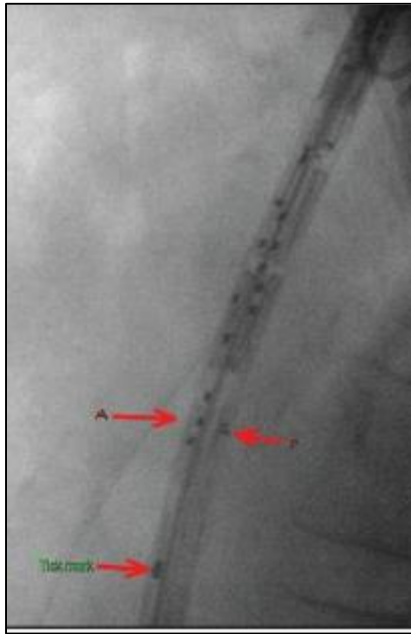
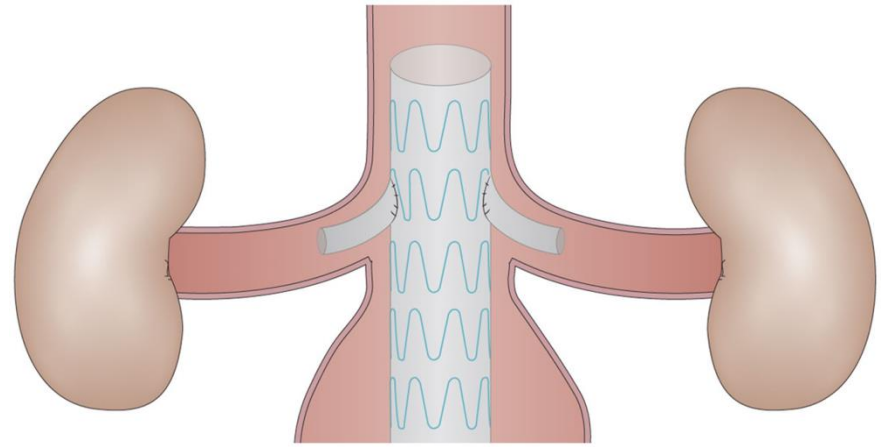
Durable

Slow convalescence

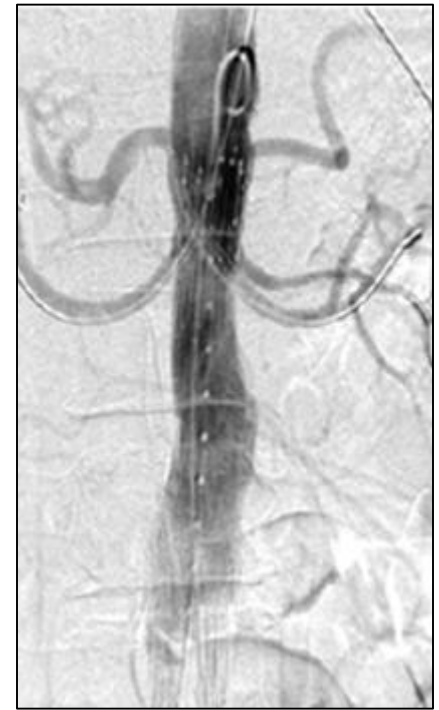
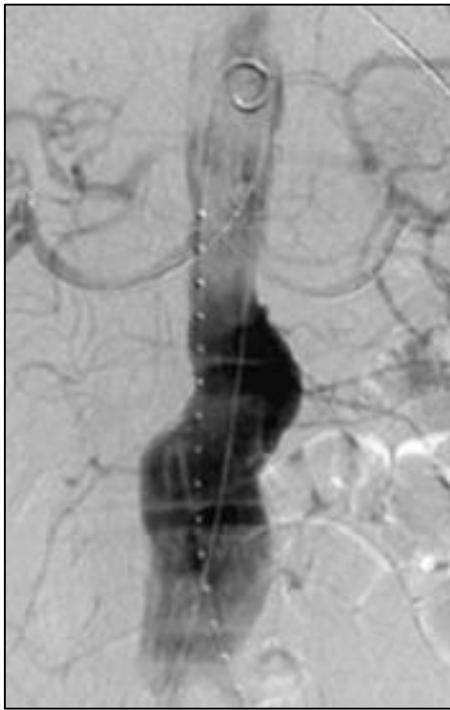
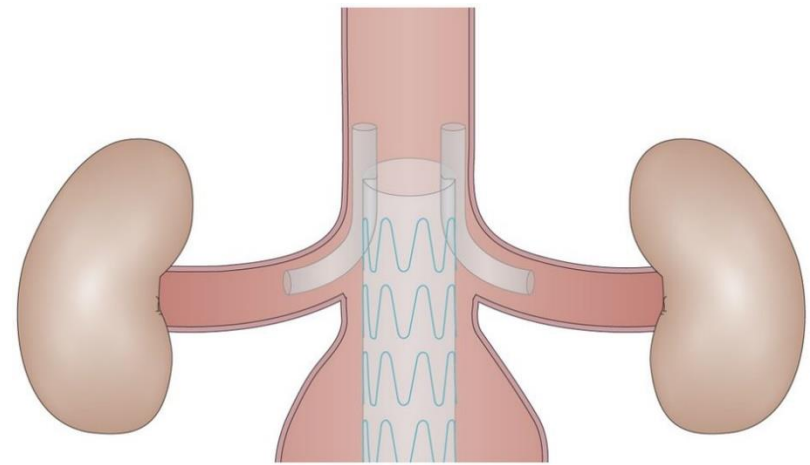
Mortality and morbidity

NVR 2018 Complex AAA
mortality = 18%

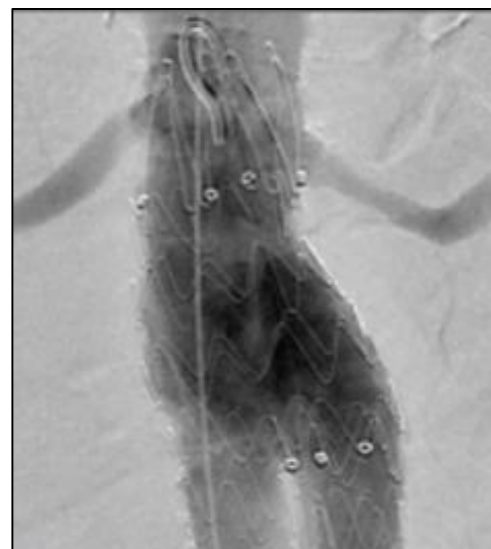
Fenestrated EVAR



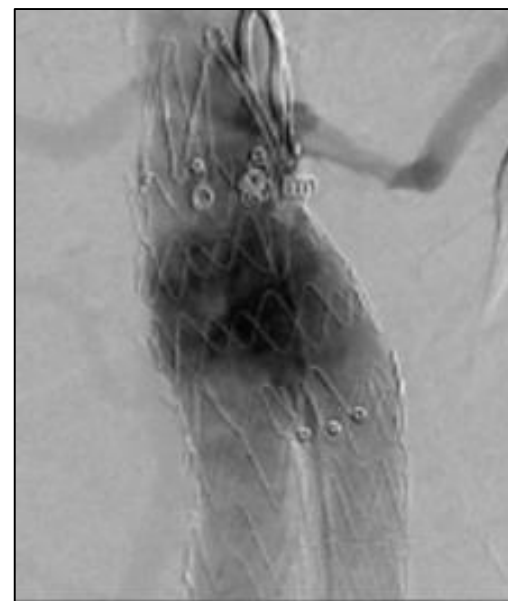
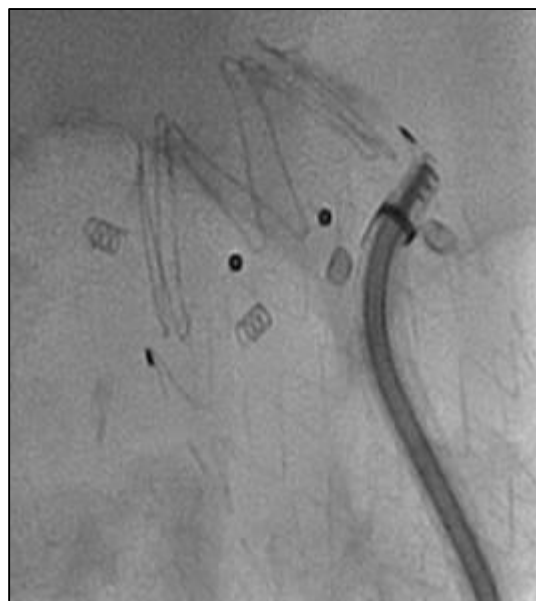
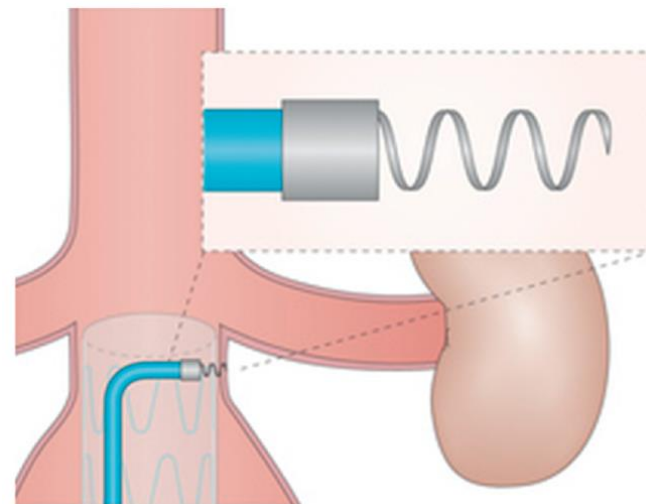
Chimney EVAR



EVAR + Endoanchors



VSASM 28-30 Nov 2018

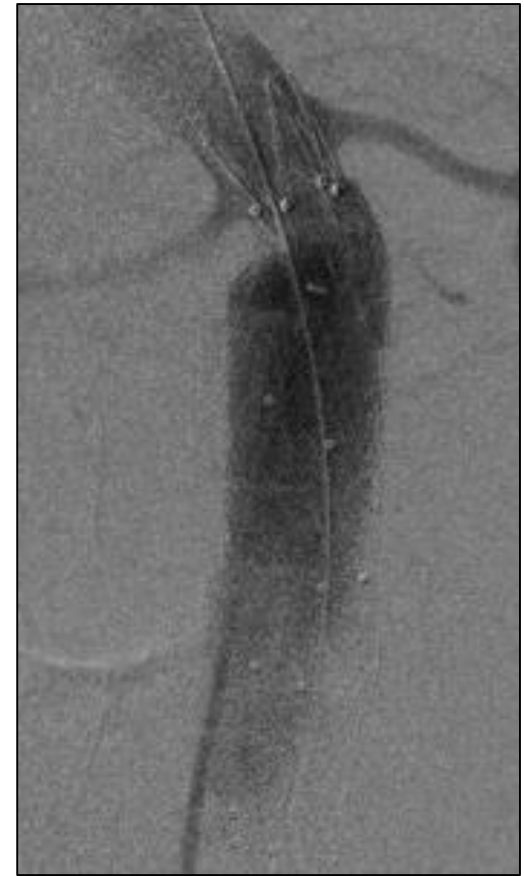


UNIVERSITY OF
LIVERPOOL

Liverpool Vascular &
Endovascular Services



Off-label standard EVAR



Endovascular techniques

- Some more vigorously evaluated than others
- Lower risk of operative death
- Secondary intervention
- Late failure
- What is the magnitude of incremental benefit?
- How long does it last and at what cost?

A Risk-adjusted and Anatomically Stratified Cohort Comparison Study of Open Surgery, Endovascular Techniques and Medical Management for Juxtarenal Aortic Aneurysms





Investigators

Funded and supported by



National Institute for
Health Research

- **Mr. Colin Bicknell**, Imperial College Healthcare NHS Trust
- **Mr. Jonathan Boyle**, Cambridge University Hospitals NHS Trust
- **Professor John Brennan**, Royal Liverpool University Hospitals NHS Trust
- **Mr Paul Hayes**, Cambridge University Hospitals NHS Trust
- **Professor Ian Loftus**, St George's healthcare NHS Trust
- **Mr Vince Smyth**, Central Manchester University Hospitals NHS Foundation Trust

- **Dr Jai Patel**, Leeds Teaching Hospitals NHS Trust
- **Dr Peter Rowlands**, Royal Liverpool University Hospitals NHS Trust

- **Professor William (Bruce) Campbell**, Royal Devon & Exeter NHS Foundation Trust
- **Dr Andrew Cook**, University of Southampton

- **Dr Rui Duarte**, University of Liverpool

- **Miss Charlotte Rawcliffe**, Liverpool cancer Trials Unit

- **Dr Richard Jackson**, University of Liverpool

- **Ms Clare Perkins**, Public Heath England
- **Mr Sacha Wyke**, Public Heath England

This research is funded by the NIHR HTA Programme through a grant of £ 1.27 million.

The views expressed are those of the investigators and not necessarily those of the NHS, the NIHR or the Department of Health.

Objective 1: To compare different treatment strategies corrected for confounding characteristics

Objective 2: To identify if a particular characteristic gives better outcomes with a particular treatment strategy.

Objective 3: To compare different treatment in terms of overall survival and long-term treatment failure

Objective 4: To perform cost effectiveness analyses in terms of quality adjusted life years

Objective 5: To establish the clinical and cost utility of FEVAR and of off-label standard EVAR, in patients who are considered physiologically unfit for OSR, and to compare these against medical management.

Inclusion criteria:

- Elective Juxtarenal AAA repair in England
 - Four strata of anatomical complexity – Corelab
- Juxtarenal AAA \neq < 55 mm and placed on Medical Management 'Operation-deferred'

Exclusion criteria:

- Aneurysm neck anatomy suitable for standard infrarenal EVAR within IFU of any CE marked device
- Emergency operations, Surgeon-modified devices
- Thoracic or thoracoabdominal aneurysms
- 'Medical Management Operation Declined' patients

Primary endpoints:

- **Early:** Death
- **Late follow-up:** Mortality, aneurysm-related mortality

Secondary endpoints:

- **Early:** Paraplegia, secondary intervention, organ system complications, stent-graft complications
- **Late follow-up:** Secondary intervention, stent-graft complications, graft infection, graft rupture incisional hernia – untreated / operated, anastomotic aneurysm, anastomotic-enteric fistula, renal infarction.

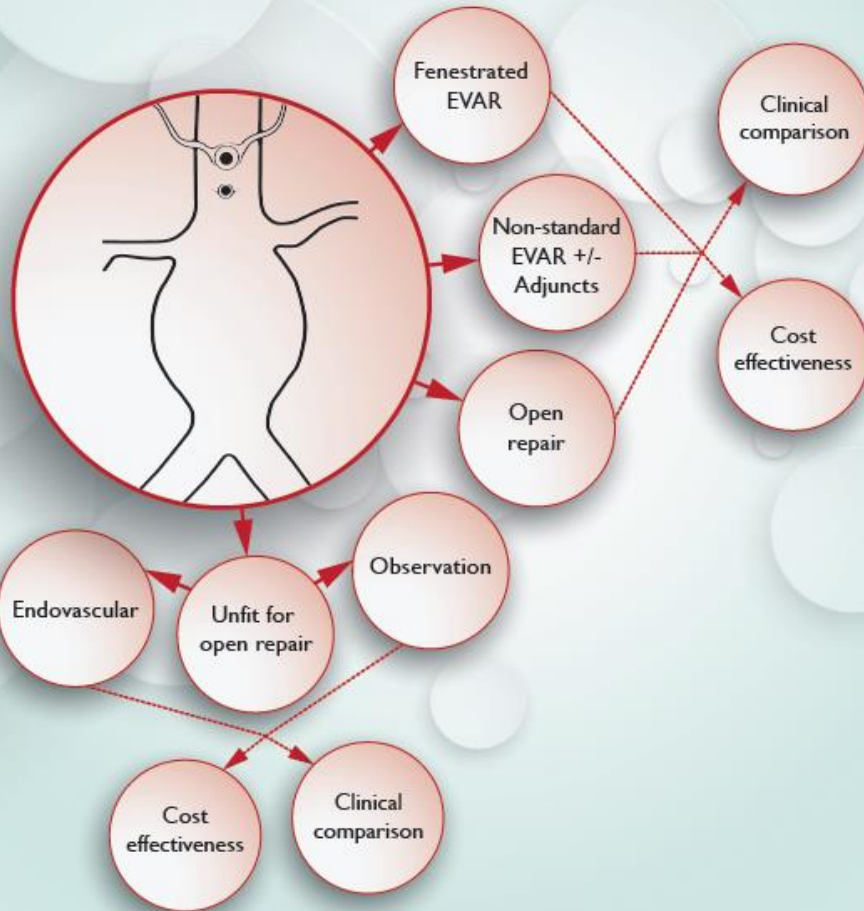
- **PROMs:**

- **Quality of Life measures:**

- EuroQuol EQ-5D 5SL
- Aneurysm-DQoL
- Aneurysm-SRQ
- Aneurysm TSQ

- **Resource use diary**

The UK COMplex Aneurysm Study



Funded and supported by



National Institute for Health Research

- Will deliver the evidence called for in the NICE Guidelines Consultation
- Recruiting now
- Stand 32
- Thank you!

