

June 23rd – BREXIT?



Late rupture after EVAR

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Late rupture = clear failure of EVAR



Clear failure of treatment

- ▶ failure of concept?
- ▶ failure of application?
- ▶ failure of technology?
- ▶ failure of monitoring?
- ▶ can it be eradicated?

Late rupture – what do we know?

- ▶ Meta-analysis – Antoniou, JEVT 2015
- ▶ 17000 EVARs, 152 late ruptures
- ▶ incidence 0.9%
- ▶ mean time to rupture 37months
- ▶ 66% due to graft related endoleak
- ▶ not device specific
- ▶ nagging Achilles heel

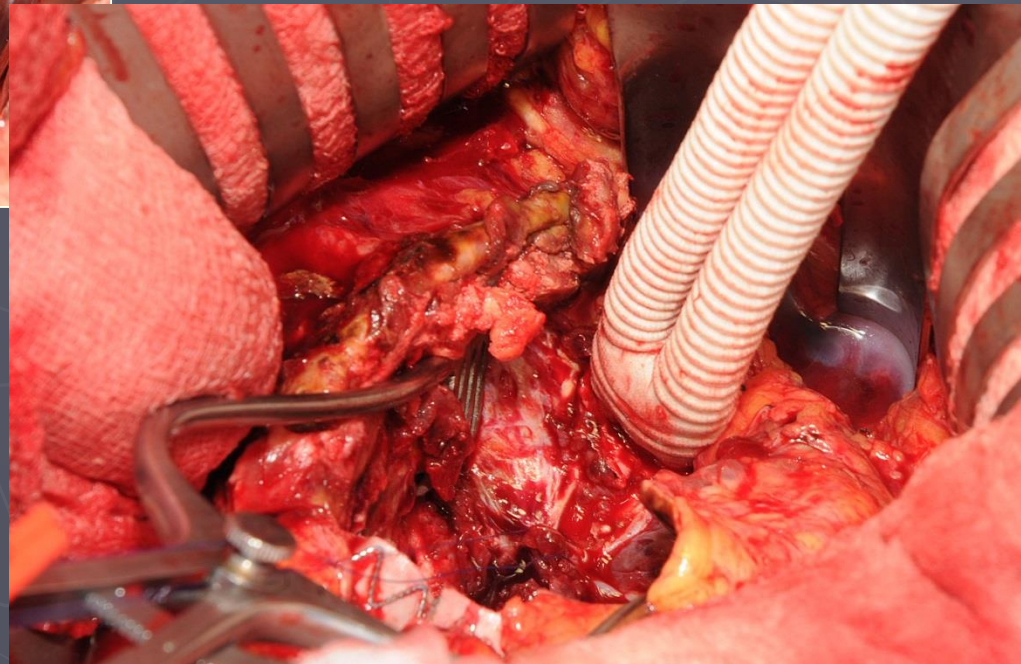
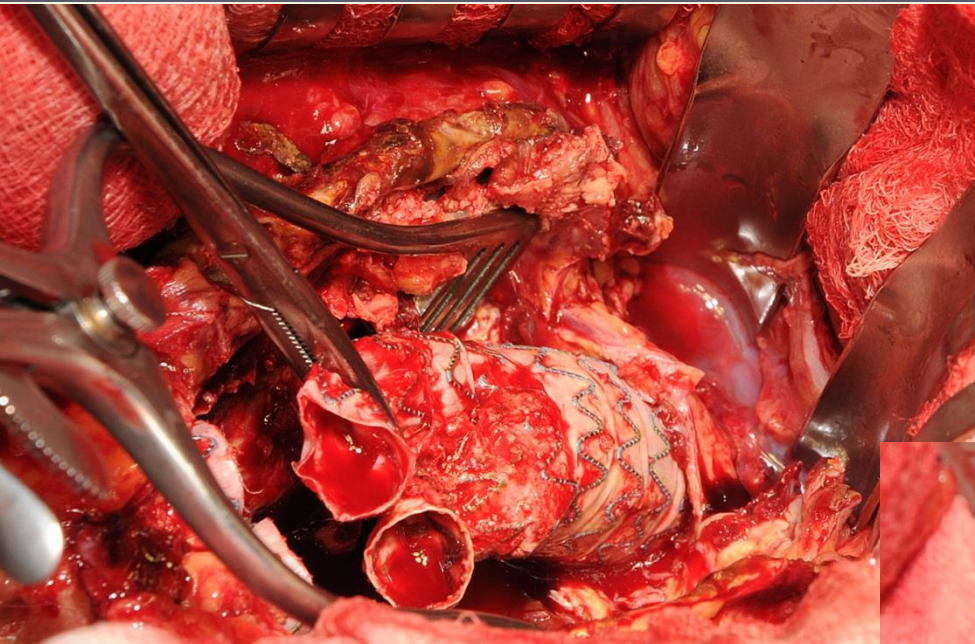
Causes

Cause	N	%
Type I endoleak	106	50
Ia	55	26
Ib	28	13
I - unspecified	23	11
Type III endoleak	33	16
Type IV endoleak	1	0.5
Combination of endoleaks	8	4
Unspecified endoleak	5	2
Expansion without endoleak	3	1
Type II endoleak	17	8
Migration	12	6
Other/unspecified	25	12

Late rupture - prevention

- ▶ caution in hostile anatomy
- ▶ avoid off-label use
- ▶ low threshold to extend proximal seal zone caudally
- ▶ accurate deployment - imaging
- ▶ robust surveillance – tailored?
- ▶ timely intervention - ?Type II

Management



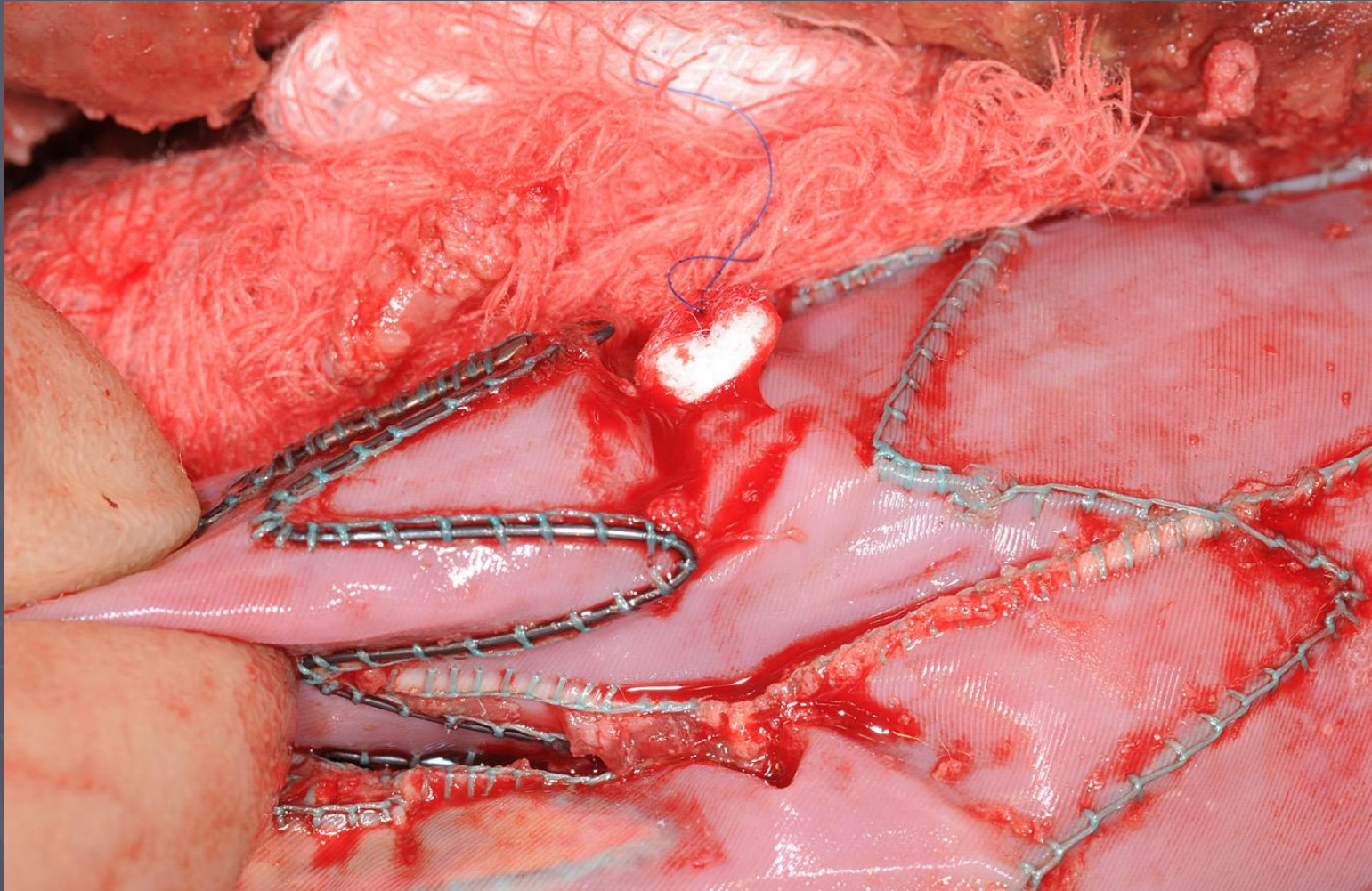
Management



Clear failure of treatment

- ▶ failure of concept?
- ▶ **failure of application**
- ▶ failure of technology?
- ▶ failure of monitoring?
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Failure of concept?



Conceptual flaws

- ▶ inferior fixation – no sutures
- ▶ bridging endoluminal space
- ▶ feeding vessels not managed
- ▶ device fatigue – aortic pulsations
- ▶ disease progression
- ▶ why does it work at all?!!?

Areas to think about

- ▶ better primary fixation - staples
- ▶ managing the endoluminal space – bags, polymer
- ▶ tackling lumbar & IMA – embolisation, polymer
- ▶ potential impact of EVAS
- ▶ is the incentive big enough?
- ▶ will practice change?

Thank you

