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TEVAR for Acute TBAD Significantly Reduces All-Cause Mortality at 3-years Compared to Best Medical Management: New Data on Outcomes of All Dissections in England: We Really Don't Need a Randomized Trial

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Disclosures

- Data taken from National Consultant Information Programme (NCIP)
- Joint Clinical Lead NCIP and GIRFT (NHS England)
- Departmental funding from Medtronic, WL Gore, Cook and Endologix



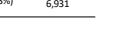

Outcomes for Acute Aortic Dissection in England 2018-2022

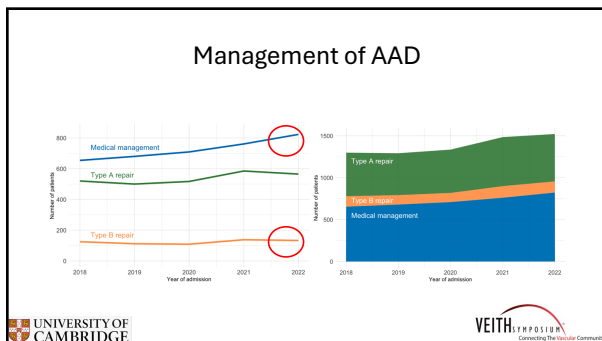
- Index admission: January 2018 – December 2022
- Outcomes up to December 2023 (1-year follow up)
- Collected in NCIP AAD Dashboard
- Adult emergency AAD admissions
- 7,011 patients
- Previous emergency admission with AAD in last 3 years (n=80) excluded
- → 6,931 analysed



Annual Numbers of Patients with AAD



Year	Type A repair	Type A and desc. repair	Type A and arch repair	Type B repair	Medical management	Overall
2018	317 (24.4%)	67 (5.2%)	136 (10.5%)	125 (9.6%)	654 (50.3%)	1,299
2019	264 (20.4%)	54 (4.2%)	183 (14.2%)	111 (8.6%)	680 (52.6%)	1,292
2020	269 (20.1%)	54 (4.0%)	195 (14.6%)	108 (8.1%)	709 (53.1%)	1,335
2021	300 (20.2%)	63 (4.2%)	224 (15.1%)	136 (9.2%)	761 (51.3%)	1,484
2022	277 (18.2%)	77 (5.1%)	211 (13.9%)	133 (8.7%)	823 (54.1%)	1,521
Total	1,427 (20.6%)	315 (4.5%)	949 (13.7%)	613 (8.8%)	3,627 (52.3%)	6,931

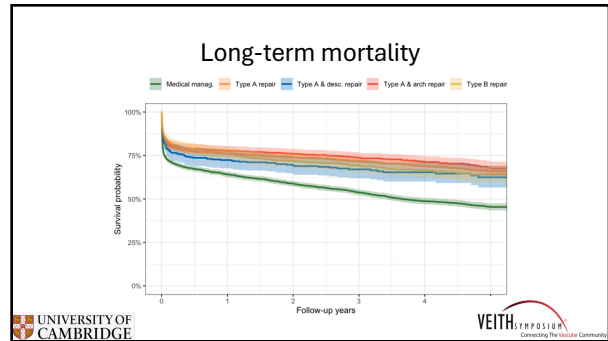
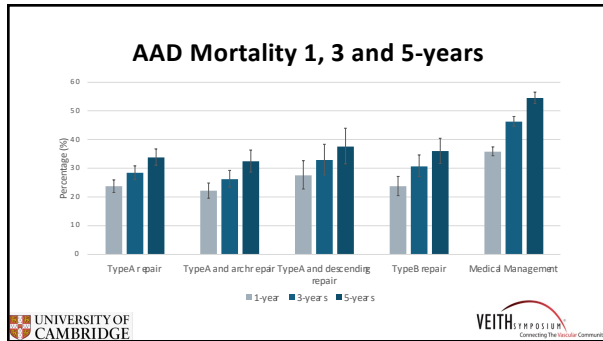




Index Admission In-Hospital Mortality

Year	Type A repair	Type A & arch repair	Type A & descending repair	Type B repair	Medical management
2018	18.6%	17.6%	19.4%	10.4%	22.0%
2019	19.3%	16.4%	16.7%	21.6%	23.1%
2020	19.7%	18.5%	25.9%	22.2%	26.1%
2021	15.3%	16.5%	25.4%	14.0%	23.8%
2022	22.4%	18.5%	19.5%	14.3%	24.7%





5-year Type B Dissection Mortality

- Medically managed TBAD 55%
- TEVAR managed TBAD 36%
- Based on administrative data
- Data unadjusted for confounders

National Vascular Registry Type-B Data

- 2016-2021 – 6 years
- 540 procedures for TBAD
- Majority TEVAR (97%)
- Overall mortality = 8.9%
- Elective = 6.2%;
- Emergency = 11.1%
- No data on medically treated TBAD

<https://www.vsqip.org.uk/reports/2022-annual-report/>

Conclusions

- Incidence of aortic dissection is increasing
- Majority of Acute Type B dissections treated medically
- 5-year outcomes for TBAD better for TEVAR
- Unadjusted data
- Trials in uncomplicated TBAD (Sunday, Earnest) will provide better evidence on benefits of TEVAR

Acknowledgements

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