



ACTACC Aortic Dissection Audit

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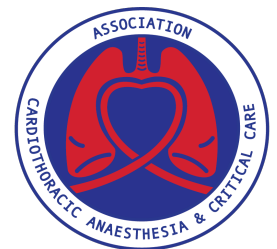
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Association of CardioThoracic Anaesthesia and Critical Care (ACTACC) AUDITS



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Anaesthesia 2016, 71, 627–635

doi:10.1111/anae.13423

Original Article

The incidence and importance of anaemia in patients undergoing cardiac surgery in the UK – **the first Association of Cardiothoracic Anaesthetists national audit***

A. A. Klein,¹ T. J. Collier,² M. S. Brar,³ C. Evans,⁴ G. Hallward,⁵ S. N. Fletcher⁶ and T. Richards,⁷ on behalf of the Association of Cardiothoracic Anaesthetists (ACTA)*

Anaesthesia 2021, 76, 19–26

doi:10.1111/anae.15070

Original Article

The incidence and effect of resternotomy following cardiac surgery on morbidity and mortality: a 1-year national audit on behalf of the Association of Cardiothoracic Anaesthesia and Critical Care

S. Agarwal,¹ S. W. Choi,² S. N. Fletcher,³ A. A. Klein,⁴ R. Gill⁵ and Contributors[#]

Open Access

Research

BMJ Open Effect of individual patient risk, centre, surgeon and anaesthetist on length of stay in hospital after cardiac surgery: **Association of Cardiothoracic Anaesthesia and Critical Care (ACTACC) consecutive cases series study of 10 UK specialist centres**

Olympia Papachristofi,¹ Andrew A Klein,² John Mackay,² Samer Nashef,³ Nick Fletcher,⁴ Linda D Sharples,¹ on behalf of the Association of Cardiothoracic Anaesthesia and Critical Care (ACTACC)

Anaesthesia 2019, 74, 1121–1129

doi:10.1111/anae.14649

Original Article

Association between anaesthetic technique and unplanned admission to intensive care after thoracic lung resection surgery: the second Association of Cardiothoracic Anaesthesia and Critical Care (ACTACC) National Audit*

B. G. Shelley,¹ P. J. McCall,² A. Glass,³ I. Orzechowska,⁴ and A. A. Klein,⁵ on behalf of the Association of Cardiothoracic Anaesthesia and collaborators[#]

Anaesthesia 2020, 75, 21–26

doi:10.1111/anae.14734

Original Article

Complications related to peri-operative transoesophageal echocardiography – a one-year prospective national audit by the Association of Cardiothoracic Anaesthesia and Critical Care

G. Ramalingam,¹ S.-W. Choi,² S. Agarwal,³ G. Kunst,⁴ R. Gill,⁵ S. N. Fletcher⁶ and A. A. Klein,¹ on behalf of the Association of Cardiothoracic Anaesthesia and Critical Care*



Association of CardioThoracic Anaesthesia and Critical Care (ACTACC) AUDITS

| | Publication Year | Journal | Citations | Centres |
|----------------------|------------------|-------------|-----------|---------|
| Klein et al. | 2016 | Anaesthesia | 153 | 12 |
| Shelley et al. | 2019 | Anaesthesia | 25 | 16 |
| Papachristofi et al. | 2016 | Anaesthesia | 65 | 10 |
| Ramalingam et al. | 2019 | Anaesthesia | 45 | 28 |
| Argawal et al. | 2021 | Anaesthesia | 25 | 23 |



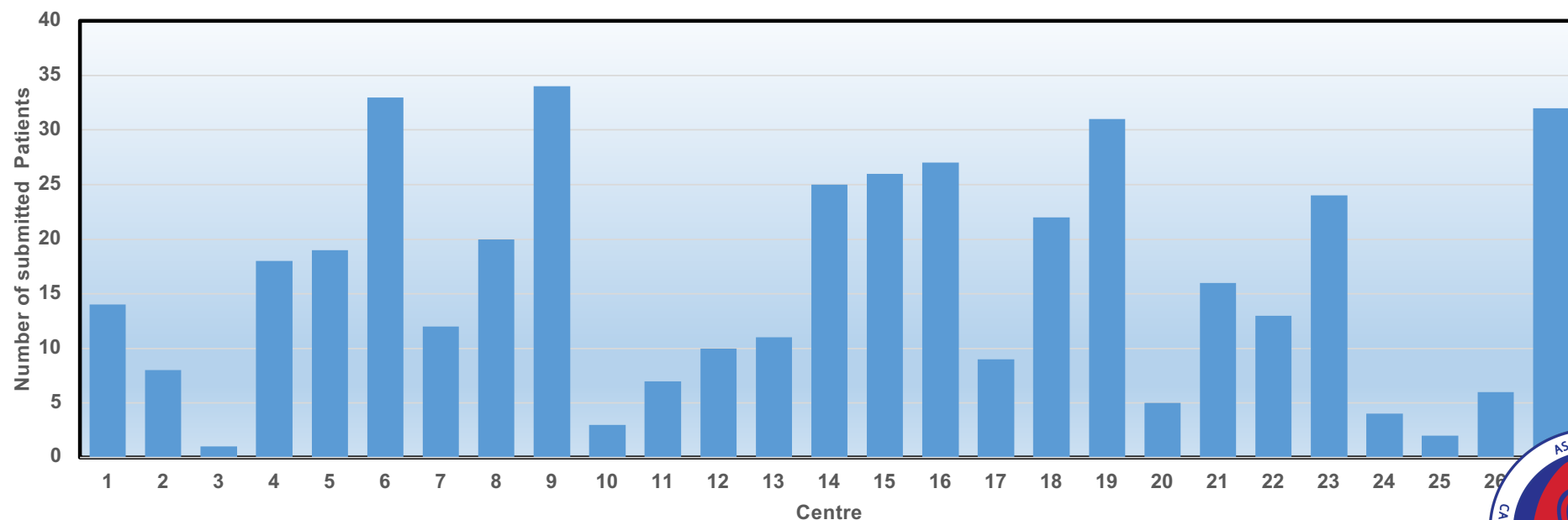
| Centre | Hospital | Audit Lead |
|----------------------------|--|-----------------|
| Aberdeen | Aberdeen Royal Infirmary | P. Sasidharan |
| Basildon | Essex Cardiothoracic Centre | G. Namjoshi |
| Belfast | Royal Victoria Hospital | F. Flynn |
| Birmingham | Queen Elizabeth Hospital | H. Singh |
| Blackpool | Lancashire Cardiac Centre | M. Hartley |
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| Newcastle | Freeman Hospital | M. Prabhu |
| Oxford | John Radcliffe Hospital | A. Keiralla |
| Sheffield | Northern General Hospital | D. Woodward |
| Southampton | University Hospital Southampton | S. Sandys |
| Stoke on Trent | University Hospital North Midlands | R. Jeeji |
| Swansea | Morriston Hospital | F. Husain |
| Wolverhampton | New Cross Hospital, Heart & Lung Centre | D. Morrice |

Out of 32 centres – 27 participated

Centres received random numbers

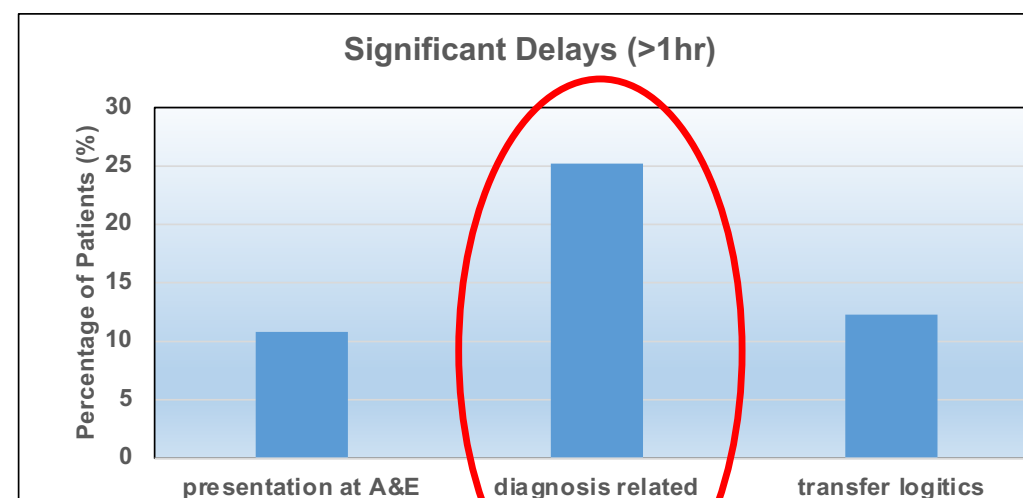
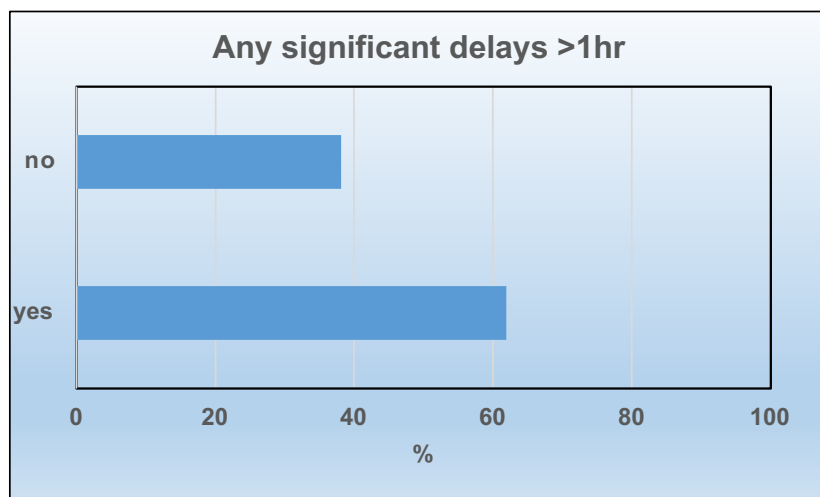


Centres and Numbers of Cases

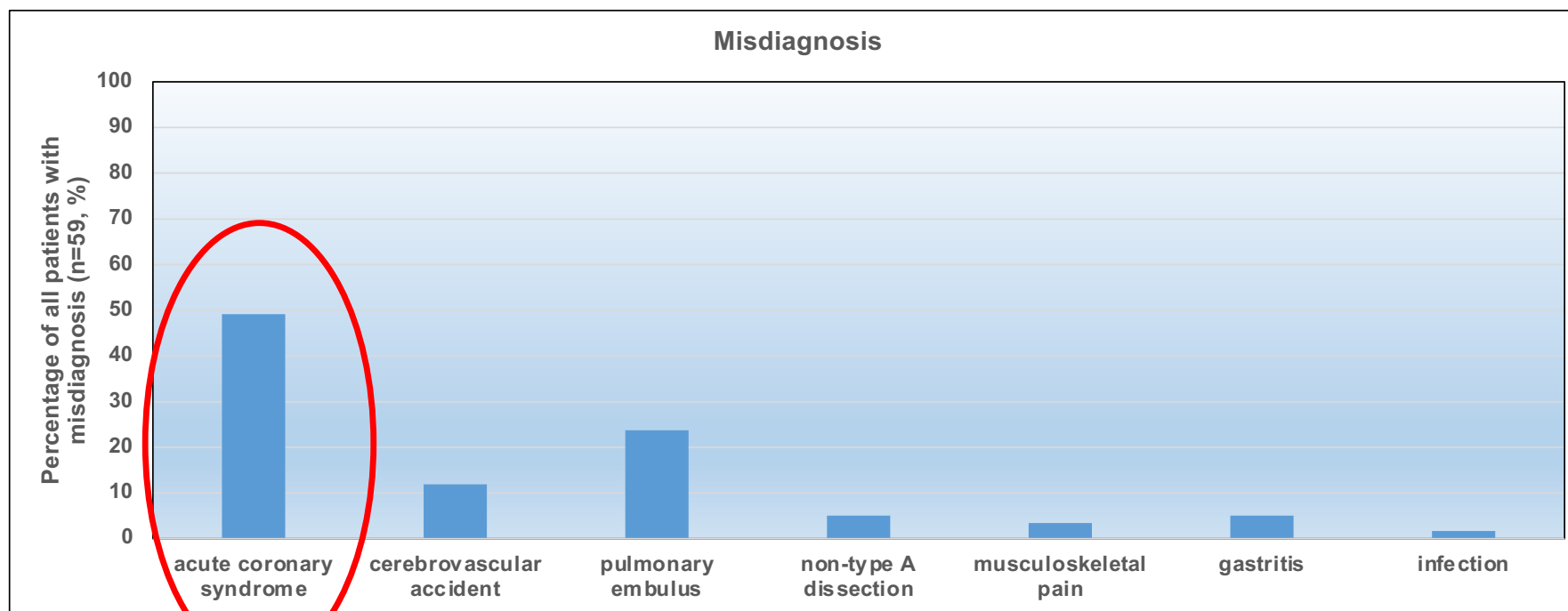


Delays before Surgery

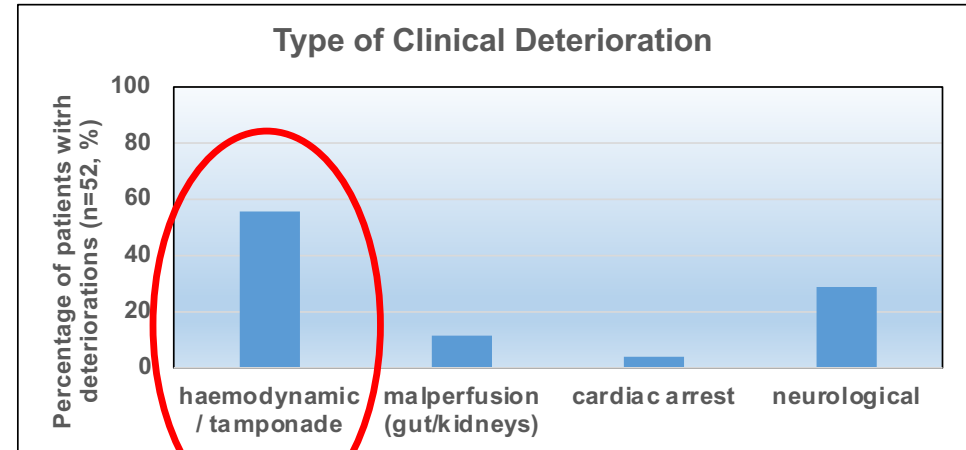
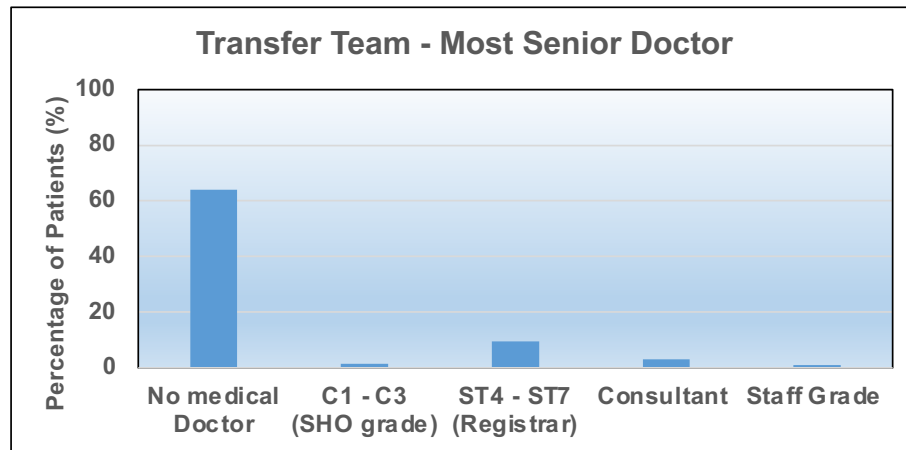
Were there any significant delays (>1hr) during the patient's journey between onset of symptoms and admission to theatres?



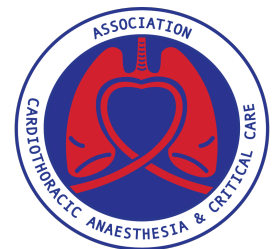
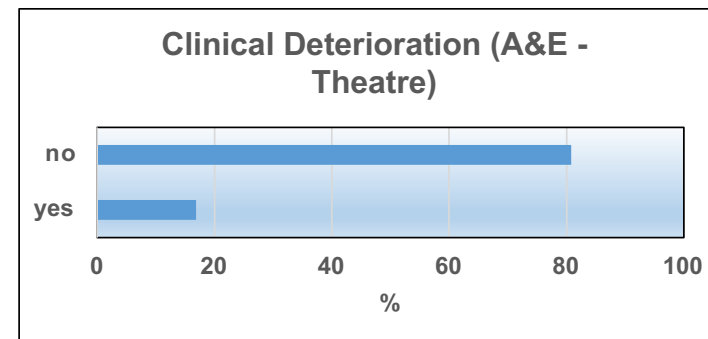
Delays before Surgery



Arrival in Cardiac Theatres

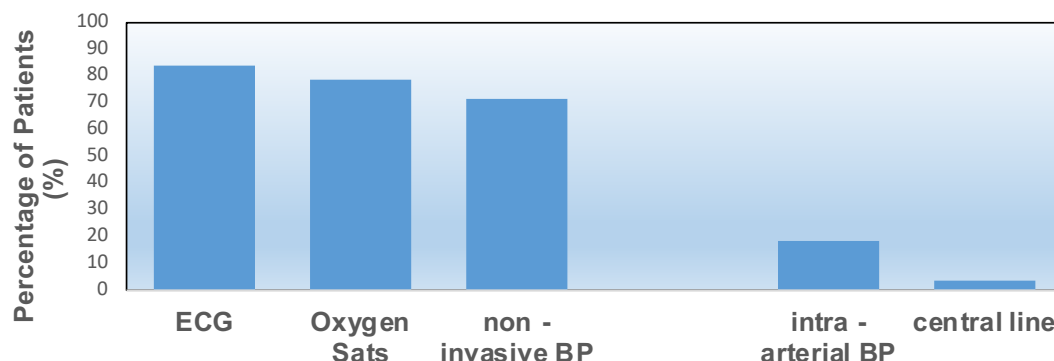


Was there a significant clinical deterioration between presentation to A&E in the first hospital and arrival in the operating theatre?



Arrival in Cardiac Theatres

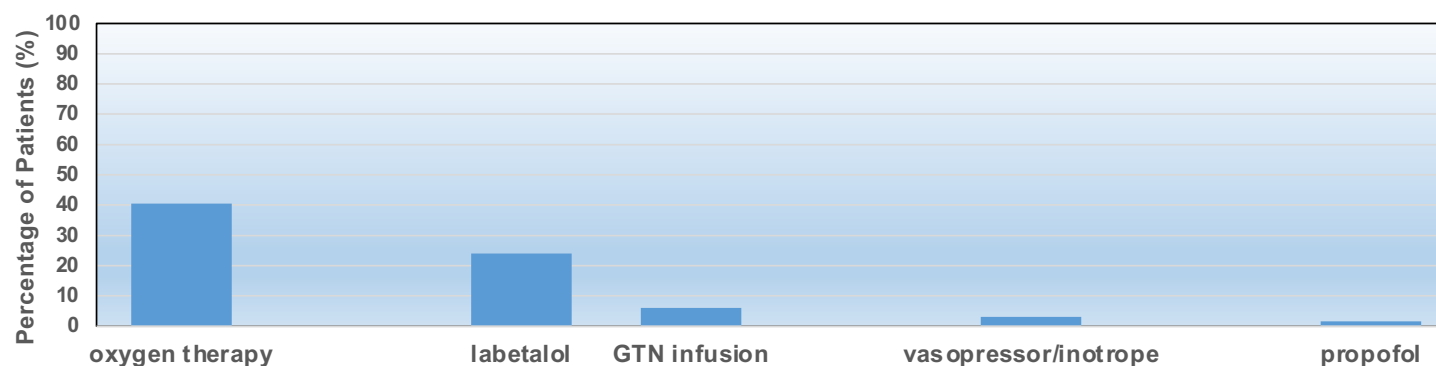
Monitoring at Arrival in Theatre



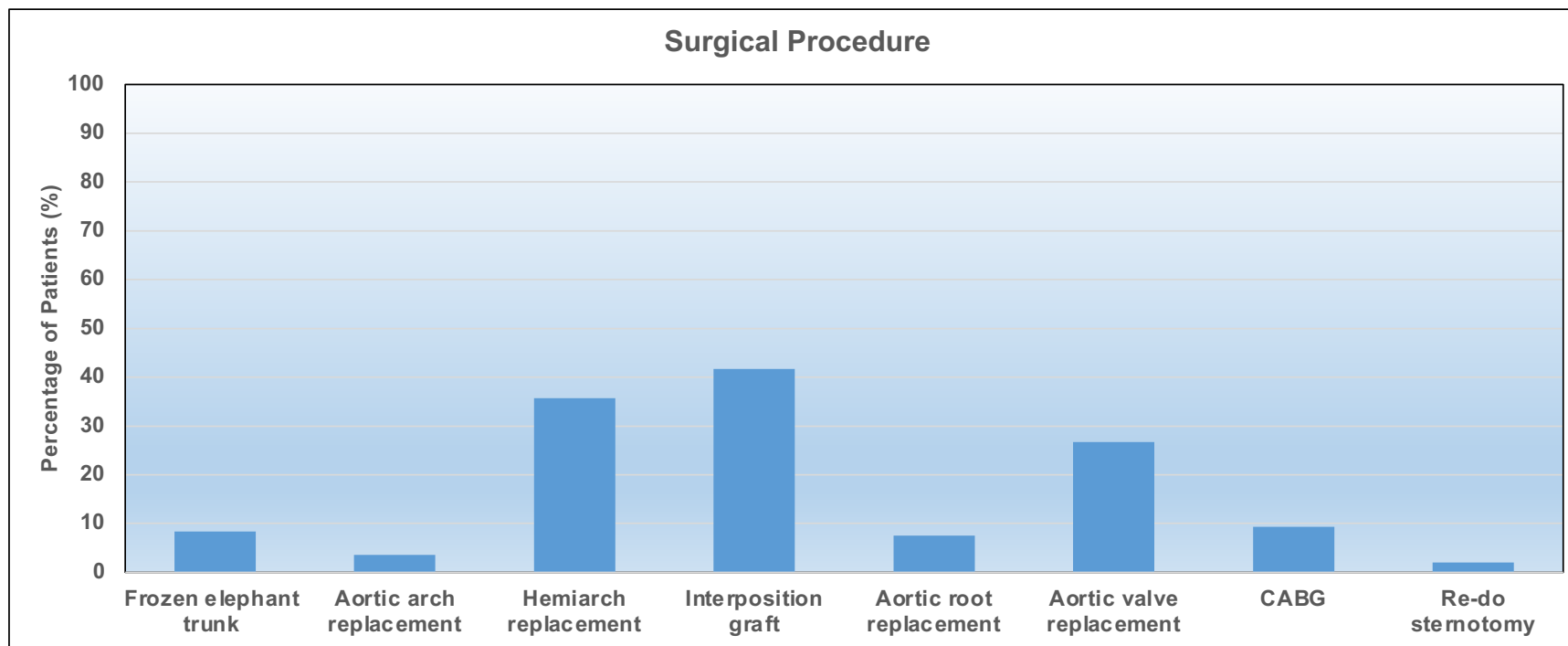
Glasgow Coma Scale

GCS at arrival in theatres 15 (3 - 15)
Median (range)

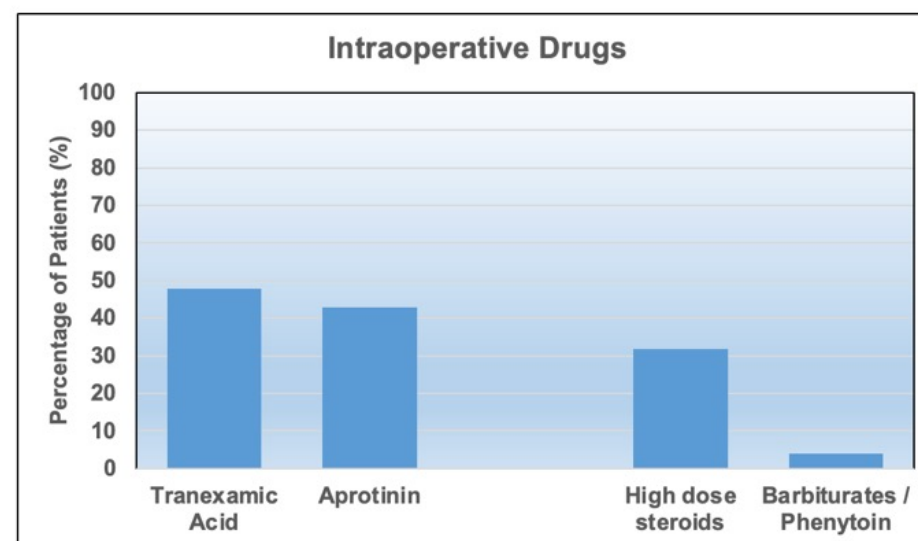
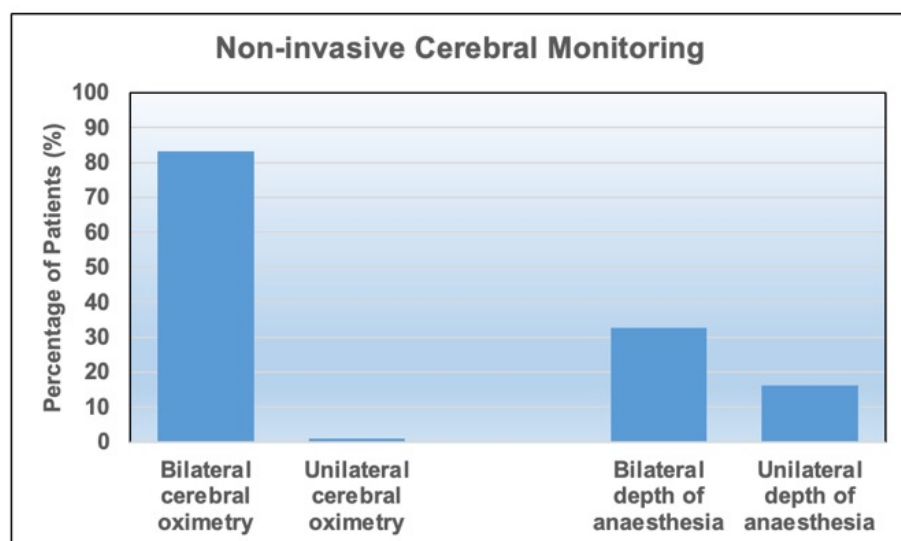
Treatment on Arrival in Theatres



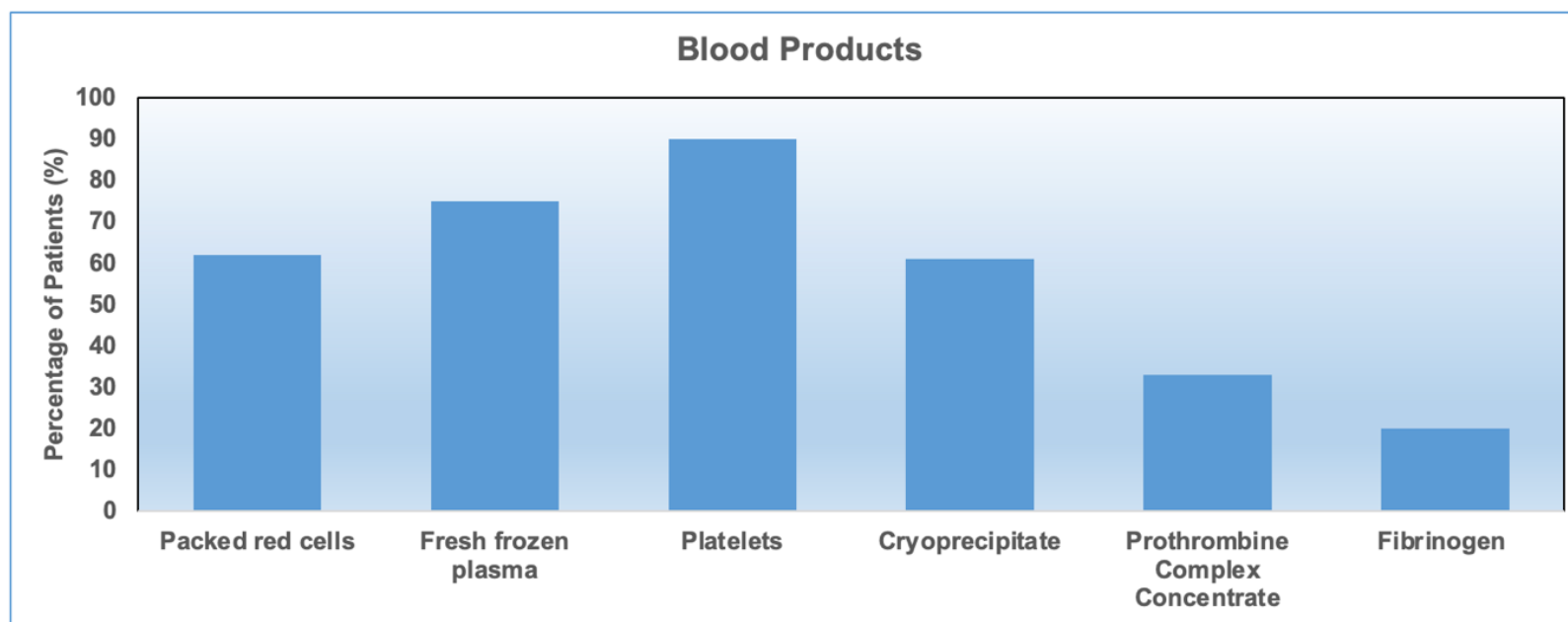
Intra - Operative Results



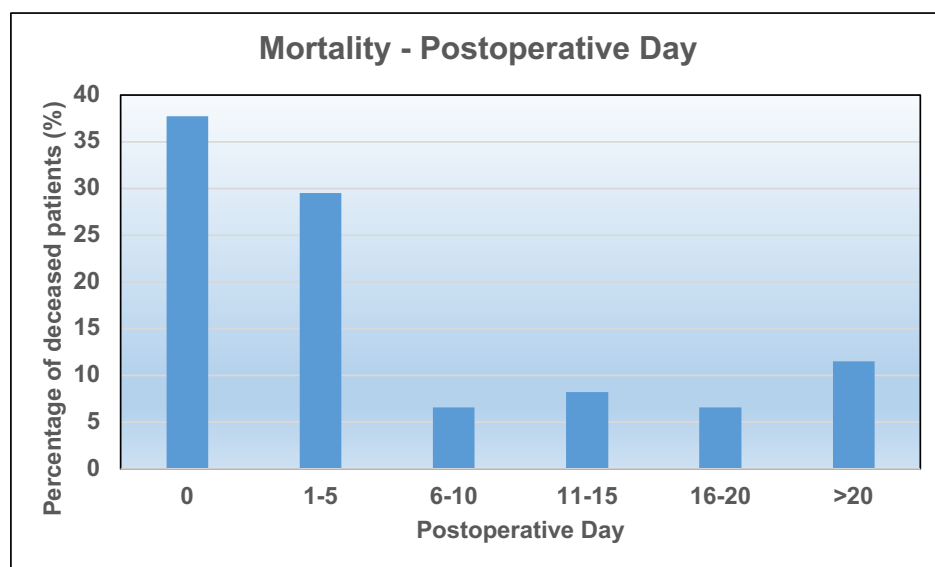
Intra - Operative Results



Intra - Operative Results



Outcomes



Preoperative Variables

| | | Survived (n=268; 80.5%) | Died (n=65; 19.5%) | p-value |
|-----------------------------|-----------|-------------------------|--------------------|---------|
| Age yr, Mean (SD) | | 61.8 (13.5) | 63.7 (13.7) | 0.32 |
| Gender | Male | 165 (61.6%) | 42 (64.6%) | 0.76 |
| | Female | 103 (38.4%) | 23 (35.4%) | |
| First Cardiac Centre, n (%) | | 246 (91.8%) | 56 (86.2%) | 0.24 |
| GCS, Median [IQR] | A&E | 15 [15-15] | 15 [15-15] | <0.01 |
| | Theatre | 15 [15-15] | 15 [14-15] | <0.01 |
| Drug Infusion, n (%) | Labetalol | 65 (24.3%) | 15 (23.1%) | 0.97 |
| | GTN | 19 (7.1%) | 1 (1.5%) | 0.16 |

Outcomes

Logistic regression analysis between in hospital mortality and clinical deterioration

| Categories | | Odds ratio | 95% C.I. | P value |
|-------------------------|-----|------------|--------------|----------|
| Neurological compromise | No | Reference | - | - |
| | Yes | 9.564 | 3.145-29.082 | < 0.0001 |
| Haemodynamic compromise | No | Reference | - | - |
| | Yes | 2.255 | 1.000-5.085 | 0.050 |

Neurological Compromise:

GCS \leq 12 at A&E presentation or at arrival in theatres, or deterioration by \geq 3

Haemodynamic Compromise:

Systolic BP < 90 at A&E presentation or arrival in theatres



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