



Variations in Perfusion Practice during Adult Cardiac Surgery: A Statewide Survey

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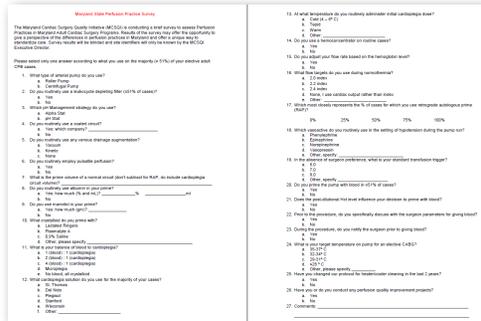


Objectives

- Conducting safe cardiac surgery requires adherence to best practices and strong intraoperative communication
- Standardization improves quality while minimizing the complexity of care
- We examined whether there was variation in perfusion practices and an opportunity to standardize care

Methods

- A paper-based survey was conducted amongst all the practicing perfusionists in the state of Maryland regarding most common practices (i.e. >51% adult cases)
- Respondents answered a 20-question anonymous survey while only identifying their site-of-practice



Results

- 80% response rate from 54 practicing perfusionists in the state of Maryland
- Do you discuss parameters for administering blood prior to beginning a case?



- Do you notify the surgeon prior to administering blood?



- Standard hemoglobin transfusion thresholds



- Do you adjust pump flow rate based on hemoglobin level?



- Do you routinely use a hemoconcentrator?



- Fraction of cases for which you use retrograde autologous prime?



- What cardioplegic solution do you use for the majority of your coronary cases?



- How much mannitol do you prime the pump with?



Limitations

- Intraoperative decisions are rarely taken by a single person
- Surgeon preference was not factored into the questionnaire
- Perfusionist-volume was not weighted into answers

Conclusions

- Significant variation exists in perfusion practice, notably regarding administration of blood products and pump priming techniques
- Lack of uniform behavior underscores the need for improved understanding of perfusion-related outcomes.
- Further efforts to improve patient-care should consider standardizing cardiopulmonary bypass protocols

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