Brain Monitoring and Cardiovascular Anaesthesia
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Neurological injury perioperatively has become increasingly recognized in paediatric and adult cardiac surgery. While it has been known since the advent of cardiac surgery that neurological injury is a risk it has only been more recently appreciated that this is a continuum and that the majority of patients suffer some neurological changes perioperatively.

In order to minimize neurological injury you need to be able to identify patients at risk and take steps to prevent injury occurring.

An essential part of this process is being able to monitor the brain to detect and then correct changes that may lead to injury. Unfortunately clinical monitoring of the brain during anaesthesia and surgery has been a long neglected area.

Newer technology has allowed for brain monitoring to become more widely used and though all of these monitors have there disadvantages they are providing meaningful information in some situations.

My presentation is about our use of NIRS (Near InfraRed Spectroscopy) in paediatric cardiac surgery and how this technology may have wider applications.

References
1 Edmonds HL, Ganzel BL, Austin EA. Cerebral oximetry for cardiac and vascular surgery. Semiinvascular and Vascular Anesthesia, 2004;8:147-166


3 Murkin JM, Arango M. Near-infrared spectroscopy as an index of brain and tissue oxygenation. BJA 2009;103:Suppl i3-i13