

- Audit form for use of LiDCO*plus* Cardiac Output Monitor

Introduction

The LiDCO*plus* continuous cardiac output monitor is being trialled as a potential replacement for pulmonary artery catheter (PAC) or Oesophageal Doppler technology.

The LiDCO uses lithium haemodilution to calibrate the arterial pressure waveform and pulse contour analysis is used to give a continuous estimation of cardiac output. In addition estimation of stroke volume and systolic pressure/stroke volume variation is provided which can be used to assess "volume responsiveness".

Indication

The decision to use LiDCO monitoring will be at the discretion of the consultant responsible for the patient. Ideally it should only be employed in the following clinical situations:

1. Cardiogenic shock or post cardiac arrest syndrome.
2. Fulminant hepatic failure (instead of PAC)
3. Severe shock of any aetiology where EITHER use of a second vasopressor or inotrope/vasopressor combination is necessary OR to exclude a low cardiac output state.
4. Severe lung injury or ARDS where optimisation of patient's haemodynamic or fluid status may guide therapy.
5. "Pre-optimisation" of high risk surgical patients NOT being entered for the OPTIMISE study.

Cautions/Contraindication

Due to calibration and/or monitoring problems avoid use in patients who are receiving infusions of muscle relaxants or aortic balloon counterpulsation.

Liver transplant patients will continue to have PACs inserted in theatre.

All patients having LiDCO monitoring will require an audit form to be completed by the treating doctor.

Royal Infirmary of Edinburgh Ward 118/116

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Patient name:
DOB:
CHI:

Affix label

Date of Insertion:

Line Site: Femoral Radial Other

Complications:

Calibration undertaken by: Consultant ST Nurse Calibration successful? Y / N

Reason for Insertion	
Cardiogenic Shock	
Severe Sepsis	
Characterise Shock State/Exclude low cardiac output	
Hepatic failure	
Perioperative Optimisation	
Optimise Fluid Balance	
Other (specify)	

Did LiDCO change management?	
Guide fluid therapy	
Change/addition of vasocative drug	
Revision of diagnosis	
Other (specify)	
No Change	

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