

Coordinating Committee in Anaesthesiology

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Use of Cardiopulmonary Bypass (應用心肺體外循環機) Document no.: PILIC0348E version1.0

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Use of Cardiopulmonary Bypass Reference Information for Patients & Family

Aim of cardiopulmonary bypass

Used during cardiac surgery as a temporary replacement for patient's cardiopulmonary function

Procedures

- (a) Connect patient's great vessels to bypass machine with tubings
- (b) When the heart and lungs stop working, the machine will function as a replacement
- (c) Doctors can operate on a motionless heart
- (d) After the operation, doctors gradually step down the machine support
- (e) Patient's heart and lungs recover and function again

Possible complications

- (a) Massive / uncontrolled bleeding (may require blood, platelet or other blood product transfusion)
- (b) Vascular injury (such as vascular stenosis, aneurysm)
- (c) Renal failure (may require dialysis, usually temporary)
- (d) Respiratory failure (may require ventilator support)
- (e) Brain / spinal cord injury (such as temporary cognitive function impairment, stroke, coma, paraplegia and incontinence)
- (f) Other organ failure (such as liver, stomach, bowel and limbs)
- (g) Air embolism (may happen in lungs, limbs or other parts of the body)

Mortality

Depends on the patient's underlying condition, type of surgery, site of operation and other risk factors

Remarks

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information, please contact your anaesthetist.

Complications may sometimes occur despite all precautions. However, if they do occur, your anaesthetist will take appropriate steps to manage them.

