

Use of cardiopulmonary bypass

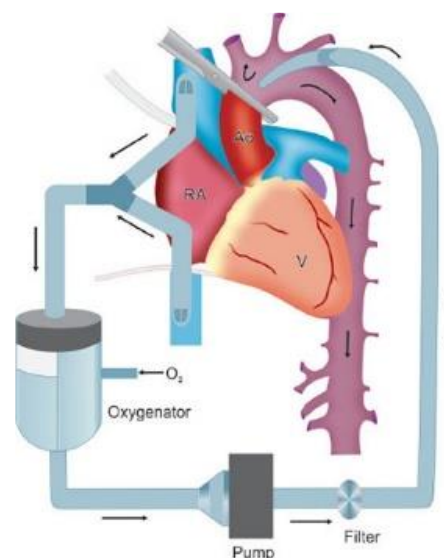
Reference information for patients & family

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