

Perioperative AKI

Preoperative AKI Risk Assessment

(anaesthetic and surgical teams) in pre-assessment clinic or ward

ASA score, consider pre-operative CPEX testing.

Pre-morbid factors: 65 years old, CKD, diabetes, vascular disease, cardiac failure, liver failure.

In emergency surgery consider current patient stability/illness severity.

Type of surgery: If 'major' operation or known high risk (e.g. cardiac bypass, intraperitoneal surgery, likely heavy blood loss or involving pelvis or renal tract).

Risk of perioperative nephrotoxic medications.

Consider pre-optimisation in ward or critical care area and scheduled post-operative admission to critical care.

There is no role for the routine use of dopamine or frusemide in perioperative AKI prevention.

Discontinue or avoid nephrotoxic drugs if possible.

If risk of long-term renal insufficiency (e.g. nephrectomy in CKD discuss with nephrology team).

Optimise circulation and oxygenation during surgery.

Postoperative AKI Risk Assessment

As per pre-op assessment. Assess surgery undertaken, blood loss, perioperative haemodynamic stability, perioperative oxygenation and perioperative oliguria.

Monitor

Observations (blood pressure, heart rate, urine volumes, regular blood tests)

Postoperative resuscitation as appropriate

If postoperative AKI develops Institute AKI Care Bundle and Referral Pathway

Consider and Treat Specific Surgical Causes

Blood loss, hypovolaemia, surgical sepsis, hypotension due to epidural or opiate anaesthesia, postoperative urinary retention or obstruction of the renal tract as a surgical complication.