BNSSG-Banes Primary care pathway for AKI e-alerts in Adult patients

AKI e-alert

Confirm or refute AKI result within clinical context and baseline creatinine

Dialysis patients will have false positive AKI alerts

Action timeline as suggested by Think Kidney Guidelines

AKI stage 3

No

Features requiring direct early discussion with nephrologist

- Kidney transplant recipient
- Suspected intrinsic renal disease - Known connective tissue disease, Vasculitis, glomerulonephritis with no other cause for AKI (sepsis, hypovolemia, u.obstruction, nephrotoxics)
- New features suggestive of intrinsic renal disease- Proteinuria, Haematuria, Accelerated Hypertension, vasculitic rash
- Likely to need dialysis- (K+ >6.5) and/or anuric/oliguric with no evidence of obstruction
- Known to renal team with CKD stage 4/5

Clinical concern or deterioration

Worsening AKI

Initiate assessment and management in community (Think Kidney Guidelines)

Review medications (Think Kidney guidelines)

Treat presumed cause and reassess

Yes

Contact Renal registrar through Southmead switchboard.

Non renal admission

No

Immediate renal admission

Renal SpR will inform operations centre x40700 of need for admission and locate bed for admission.

GP to contact medical SpR to arrange non-renal admission in MAU at local hospital (see box 4)- for management of acute illness, electrolyte imbalance and to rule out urinary obstruction.

Early clinical review

Renal SpR to arrange Acute renal clinic review (Tue/Thursday pm); or named renal consultant clinic

Recovery of AKI

GP to consider referral for early renal outpatient review
If known to renal team or as per CKD referral criteria (NBT CKD referral guidelines)

Repeat blood tests within 1 month and review medication stopped during AKI (Think Kidney Guidelines)

Patient AKI Risk Factors

Age more than 75 years
Chronic kidney disease
Previous AKI
Diabetes mellitus
Heart failure
Vascular disease
Liver disease
Cognitive impairment

AKI Risk Events

Sepsis e.g.Pneumonia, cellulitis, UTI etc
Toxins e.g.NSAIDs, Gentamicin, Herbal remedies
Hypotension e.g.relative to baseline BP
Hypovolaemia e.g.haemorrhage, vomiting, diarrhoea
Major Surgery (planned or emergency)

Box 1

Signs and symptoms of acute kidney injury?

Reduced urine output
Changes to urine colour
Nausea, vomiting
Evidence of dehydration
Thirst
Confusion and drowsiness

Box 2

AKI features to prompt earlier review

- Poor oral intake/urine output
- Evidence of hyperkalaemia, especially if moderate (K+ 6.0-6.4) or severe (K+ ≥ 6.5 - see above)
- Known history of CKD stages 4 & 5 or history of kidney transplant
- Deficient Immunity
- Frail with co-morbidities (CKD, diabetes, heart failure, liver disease, neurological or cognitive impairment)
- Past history of AKI
- Suspected intrinsic kidney disease
- Suspected urinary tract obstruction

Box 3

AKI Primary Care pathway for adult patients in BNSSG-BANES. Version 1.1 January 2023. Authors: Udaya Udayaraj, Martyn Fredlund, Stephen West, Jemima Scott, Jo Willis.

Box 4

North Bristol Trust Main Switchboard: 0117 9505050

General Practitioners should phone the GP Support Team (GPST) on 01172449283 to refer acutely unwell medical patients to the Acute Medicine Unit (AMU). The GPST will record the clinical details and advise you of where to send the patient. Faxed referral to Fax: 0117 4149486

Bristol Royal Infirmary Main Switchboard: 0117 923 0000

Medical Admissions (Monday - Friday, 09:00 - 19:00) 0117 934 9335
On contacting the BRI switchboard General Practitioners will be put through to the General Practitioner Support Unit (GPSU) located within the Ambulatory Care Unit (A413) based on level 4 in the Queens Building. Following discussion with the referring GP, the Duty GP in the unit will either arrange to; assess the patient in the GPSU; suggest management of the patient through an agreed alternative primary or secondary care pathway; or direct them to an appropriate assessment area. In this case the GP will advise the relevant assessment unit of the patient's referral.

Royal United Hospital (Bath) Main Switchboard: 01225 428331

All GP Acute Medical Referrals: 07824 334450 (8.00am - 8.00pm)
GP Liaison Nurse 01225 821746 - This is a GP only direct phone line to Nurse Practitioners to discuss patients who may be appropriate for Ambulatory Care
Out of hours, please ring Medical Reg. through switchboard

Weston General Hospital Main Switchboard 01934 636363
Referrals to medical registrar on-call via Switchboard.

Useful References:

1. Think Kidneys national programmes are led by the renal community and supported by NHS England and the UK Renal Registry: www.thinkkidneys.nhs.uk

2. NICE Guidance on Acute kidney injury: Prevention, detection and management of acute kidney injury up to the point of renal replacement therapy. Overview | Acute kidney injury: prevention, detection and management | Guidance | NICE.

3. KIDOGO AKI clinical practice guidelines: kdigo.org

4. RCPE UK Consensus Conference on Management of acute kidney injury: the role of fluids, e-alerts and biomarkers 2012: rcpe.ac.uk