

Back to Basics in Acute Kidney Injury with ABCDE

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- Acute kidney injury (AKI) is associated with prolonged hospital admissions and high mortality¹
- ~20% of hospital admissions develop AKI¹
- AKI is preventable and potentially reversible

Study Objectives

1. To improve recognition of **AKI warning signs**:

- Rise in serum creatinine ($26\mu\text{mol/l}$ from baseline)
- Urine output $<500\text{mls}$ in 24 hours
- Systolic BP $<90\text{mmHg}$

2. To introduce an **AKI checklist**:

Address Drugs

Boost blood pressure

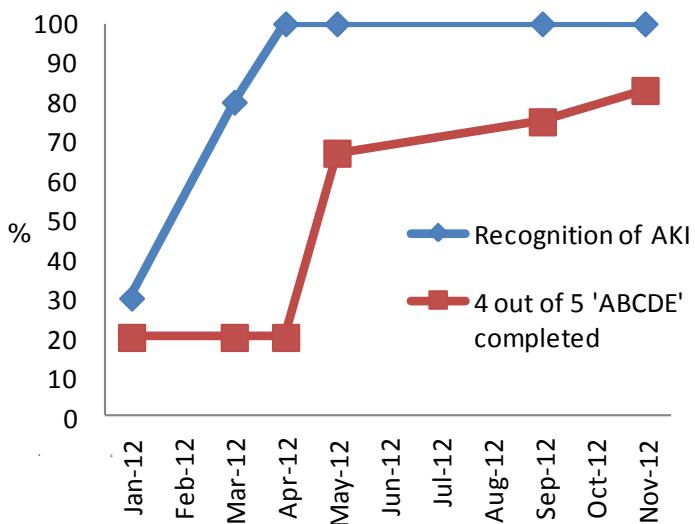
Calculate fluid balance

Dip urine

Exclude obstruction

3. To improve **AKI management**

Results



- 16% of acute adult hospital admissions had AKI
- AKI recognition improved from 31% to 100%
- Implementation of ≥ 4 'ABCDE' steps improved from 20% to 75% (surgical directorate) and 83% (MAU)

Method

AKI incidence ($26\mu\text{mol/l}$ rise in creatinine) and management (4 out of 5 'ABCDE' steps completed) measured in acute adult admissions

Pilot

- Multidisciplinary education sessions
- 'ABCDE' checklist introduction
- Reinforcement of recognition and action steps
- Assessment of impact

Extension of pilot project to the surgical directorate and the medical admissions unit

AKI recognition and implementation of 'ABCDE' measured at each stage

Conclusions

- Multidisciplinary education and the introduction of a checklist improves AKI recognition and management
- Early recognition and effective management may ameliorate the course of AKI
- Educating and empowering the multidisciplinary team improves AKI outcomes and should form a key component of strategies to address AKI

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1. Lewington A et al. UK Renal Association Clinical Practice Guideline on Acute Kidney Injury, 2011 (5th edition).

