INTRODUCTION

In 2009 the National Confidential Enquiry into Patient Outcome and Death (NCEPOD) released a report outlining optimal care standards for the investigation and management of AKI. These included consultant review within 12 hours of admission, a documented physiological monitoring plan and urine dipstick result.

Our initial audit at Epsom General Hospital indicated we were inferior to national averages in the investigation of AKI with only 8% of patients having a physiological monitoring plan and 64% having a urine dipstick documented.

Action points included implementing an ‘AKI toolkit’ proforma on the Acute Medical Unit and amending the drug chart to highlight the need to review nephrotoxic drugs.

METHOD

A retrospective case notes study of all admissions with AKI during July 2013 after implementation of the Acute Kidney Injury toolkit. Data from the 24 patients was analysed and compared to both the original audit and NCEPOD national averages. The toolkit was implemented on the Acute Medical Unit and relied on the compliance and awareness of the junior doctors. There was a 72% uptake rate.

RESULTS

There was a similar percentage of patients whose AKI was attributable to sepis in both audits, but a higher percentage due to dehydration in the re-audit. The ‘other’ causes of the initial audit included OLA, nephrotoxic drug use and Thalassemia. Of rate, all of the patients that had an obstructive cause had their renal tract ultrasound scan within 24 hours as per the NCEPOD recommendation.

There were more patients with Stage II and fewer patients with Stage III AKI in our re-audit. This made our outcomes difficult to compare, as the severity was not contributed in historically, outcome did not seem to correlate with stage of AKI in our re-audit. All of the patients that had Stage II AKI recovered, and the 4 patients that died all had Stage III AKI. It was thought that this was due to their heavier burden of co-morbidities.

NCEPOD recommends that 100% of patients with AKI have a urine dipstick analysis performed within 24 hours of admission. After implementation of the AKI toolkit there was an increase in the number of patients in which a urine dipstick was performed. Despite this, the re-audit data showed Epsom General Hospital still fell below the national average and NCEPOD recommendation.

The investigation and management of AKI falls below the standards set out by the NCEPOD report both nationally and locally, re-iterated by both audits we conducted at Epsom General Hospital. This calls for better education and stricter guidance when caring for patients with AKI. An improvement in all areas highlighted by NCEPOD was achieved with the use of an AKI toolkit, proving the effectiveness of providing a prompt for doctors and nursing staff.

CONCLUSION & RECOMMENDATIONS

Following on from the above, certain recommendations can be made:

1. An AKI toolkit should be available nationwide in NHS hospitals, in addition to trust-tailored medical clerking documents to ensure NCEPOD targets become realised across all NHS trusts. This could be in the form of a paper proforma or electronic care bundles. Promotion would be key and could be in the form of posters in clinical areas and screen savers on trust computers.

2. Education in the correct use of the AKI toolkit should be provided to medical and nursing staff. This could be at grand rounds, and junior doctor and departmental teaching.

3. Once implemented on a larger scale, further audit should be completed, with the aim being that NCEPOD recommendations are being met and overall morbidity and mortality as a result of AKI is on the decline. Audit should also be extended to AKI developing in inpatients as well as on admission.

REFERENCES
