NCEPOD AKI Report: SAM Perspective

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Context

- Important issue
- Acute Medicine deals with AKI on a daily basis (AMUs, outreach teams, HAN). Good patient care mandates that we manage it effectively and consistently
- But anecdotally we are aware that AKI is poorly recognised and managed
- Data confirm this and identify areas for focus to address these problems

Surgical Patients

Surgical patients were under-represented in the study

- Suspect that AKI may be even more under-recognised and under-treated in this group than on medical wards
- Even more of these cases may be predictable and avoidable
- Figures represented in this report may be only the tip of the iceberg
- As Acute Physicians (HAN, outreach etc) we are often involved in the care of these patients once problems are identified
- Further study is required to assess AKI in surgical patients

- Key findings

Overall Quality of Care

Only 50% of patients had good care

Suboptimal care more common in patients who *developed* AKI – only 30% of this group received good quality care

- ?patients with abnormal Cr on admission more unwell at outset, so more deteriorated despite good care
- Suggests that normal Cr at admission is falsely reassuring
- Acute Medicine has a key role to play in promoting understanding of the *risk* of AKI when the Cr is normal and avoiding poor quality early care which leads to deterioration
- First step is good assessment

Assessment

Illness severity missed in 16% of patients

- Only 55% used MEWS correctly
- SAM supports universal use of track-and-trigger system
- NEWS = **National Early Warning Score**
  - Helps recognition of illness severity
  - Promotes communication at different stages of the patient journey
  - Supports junior doctors and nursing staff to escalate intervention and involve consultants for deteriorating patients

Adequate Senior Review

Grade of admitting doctor affects overall quality of care

- Presumably reflects rapid recognition of illness severity and institution of appropriate management plan

20% had inadequate senior review

- Overall quality of their care was lower

Assessment

- **The early hours of an acute illness are the golden time for intervention – must not be squandered**
- SAM supports need for competent clinical decision-makers 24/7
- Twice daily consultant ward rounds (rolling review)
- Management plan within 4 hours of admission
- Protected consultant sessions on AMU
- Must be senior supervision and support for junior doctors whenever and wherever a patient presents

- Delayed recognition of AKI

Delayed Recognition of AKI

- **12% of patients had a delay in recognition of AKI**
- Much more likely if developed AKI post-admission
- U&Es for all patients on admission – done on most AMUs and SAM supports this
- Acute Physicians need to promote awareness of *risk of AKI*, and actively look for it
- Seniors should be explicit about risk and specify when biochemistry, urine output should be checked
- All staff still need to be aware of risk in deteriorating patient

Poor Understanding of Risk

- **29% of patients had inadequate assessment of risk factors**
- Not surprisingly, worse for patients who developed AKI

- 74% of those who developed AKI got to stage 2 or 3 before diagnosis

- **60% of post-admission AKIs were predictable**
- **21% were avoidable**

- All reflects poor understanding of the pathophysiology of AKI. Failure to recognise *risk* especially if Cr normal

Action For Acute Medicine

- **Education**
  - Undergraduate level
  - Specialty curricula
  - Clinical teaching within the AMU
- Need to promote awareness of risk of AKI not just at time of admission, but *throughout the patient's stay*, especially if there is clinical deterioration
- Role for bedside screening protocols to identify patients at risk of AKI. SAM would like to be involved in the development of such protocols
- NICE CG50 report on recognition of acute illness - supports widespread implementation

- Suboptimal management

Investigation and Management of AKI

Many patients were inadequately investigated

- Urine dipstick commonly omitted
- Failure to do U&Es, ABGs, USS, and volume assessment all common

Many had inadequate management

- 22% had no catheter
- 54% nephrotoxins not stopped
- 84% had no CVP measurement
- 25% had no correction of hypovolaemia

Complications of AKI

- **Many complications were unrecognised, avoidable, or managed inappropriately**

- Complications of AKI are often life-threatening
- *We can't afford to miss them*
- Cannot rely on nephrologists to identify and treat these complications – all hospital doctors must be competent in basic recognition and management
- Particularly important for Acute Medicine

Improving Management

- Physiological monitoring of all patients with AKI
- Basic management of AKI needs to become integral to both undergraduate and postgraduate training (this is not the domain of nephrologists alone)
- Simple interventions are often sufficient, and must occur on the AMU or wherever the patient presents
- Development of algorithms to guide management may help. SAM would welcome the opportunity to develop such guidelines
- Urine dipstick for all emergency admissions

- Nephrology referral

Nephrology Referral

68% of patients managed by admitting team

20% of the unreferred patients should have been referred

- Management by the admitting team was most appropriate for over 50% of patients…we all need these skills

- We need to know who to refer

Who to Refer?

- **NSF recommends that patients at risk of, or suffering from AKI are managed in partnership with renal teams**

- Not practical for nephrologists to deal with all patients at risk of AKI – other physicians must play a part
- Acute Medicine physicians should be regarded as **specialists in early care** i.e. trained to look after the acutely ill

- Written guidelines to clarify interaction between renal unit, critical care unit, acute medicine and general wards

Summary

- AKI is poorly recognised and poorly managed
- Acute Medicine plays a key role in the day to day management of AKI
- Need to develop robust education and training at every level to improve understanding of the pathophysiology
- Need to emphasise the importance of basic interventions, supported by simple management algorithms
- Promote use of a track and trigger system to identify at risk patients
- Need to provide adequate senior support and supervision, especially for the acute take

Conclusion

- These are challenging goals, but we must meet them – the stakes are high
- Successful implementation of these generic changes will have beneficial effects not only for patients with AKI, but across the entire spectrum of acute medicine
- Many of the key recommendations in this report are in line with those outlined in the Acute Med Task Force document, and are fully endorsed by SAM
- We welcome this report, and as a specialty, we recognise the challenges ahead, and our key role in addressing them