**Identification and relief of urological obstruction in the setting of Acute Kidney Injury (AKI)**

**Descriptor:**

Compliance with NICE guidance 2013 on identifying and relief of urological obstruction in the setting of Acute Kidney Injury

**Background:**

NICE 2013 published imaging and decompression recommendations for patients in the setting of acute renal injury. This was implemented as a result of NCEPOD 2009 findings of poor mortality in this cohort of patients.

## The Cycle

**The standard:**

1.  Patients with no identifiable cause for acute kidney injury who are at risk of urinary tract obstruction require ultrasound within 24 hrs of assessment

2.  Once imaging is performed, immediate referral to urology is recommended if one of the following is present

     (a) pyonephrosis,

     (b) obstructed solitary kidney

     (c) bilateral upper tract obstruction and

     (d) complications of acute kidney injury caused by urological obstruction.

3.  Relief of obstruction is recommended as soon as possible **and** within 12 hrs of diagnosis

**Target:**

1.  Imaging with CT or ultrasound within 24 hrs of identification of AKI with no identifiable cause - 100%

2. Relief of urological obstruction within 12 hours  - 100 %

## Assess local practice

**Indicators:**

Percentage of patients imaged within 24 hrs following identification of AKI with no identifiable cause

Percentage of patients with pyonephrosis, obstructed solitary kidney, bilateral upper tract obstruction **​or** complications of AKI caused by urological obstruction.

Percentage of patients decompressed with 12 hrs following identification of urological obstruction.

**Data items to be collected:**

1.  Identify the patients who have undergone CT or Ultrasound for AKI via CRIS

2.  Within this cohort of patients identifiy from reports if any combination of the following is present:

    - pyonephrosis

    - obstructed solitary kidney

    - bilateral upper tract obstruction

    - complications of acute kidney injury caused by urological obstruction.

3. Identify date of admission

4.  Identify date of recognition of AKI and/or signs of infection (raised white cell count and CRP)

5.  Identify date and time for request for imaging (CT or USS)

6.  Identify date and time when imaging carried out

7.  Identify when decompression was carried out following completion of imaging

**Suggested number:**

50

**Suggestions for change if target not met:**

1.  Feedback to stakeholders regarding NICE guidance

2.  Inform clinical teams of the urgency of referral and management in this group of patients via clinical governance sessions.

3.  Re-audit in 6 months

**Resources:**

1.  Access to PACS and RIS

2.  Access to blood results

3.  12 hours of data collection and analysis

**References:**

1. NICE Acute kidney injury: prevention, detection and management August 2013 . CG[169]. [https://www.nice.org.uk/guidance/CG169](https://www.nice.org.uk/guidance/CG169%C2%A0)
2. NCEPOD Acute Kidney Injury: Adding Insult to Injury (2009) - <https://www.ncepod.org.uk/2009aki.html>

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