

## 20 Incidence of Acute Kidney Injury in Neck of Femur Fracture Patients During the COVID-19 Pandemic in Princess Royal Hospital, Telford

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**Aim:** Patients undergoing surgical repair of neck-of-femur (NOF) fractures are at higher risk of acute kidney injury (AKI). NICE and BOAST have published guidelines to help prevent the occurrence of AKI, including adequate fluid resuscitation pre- and post-operatively. An audit was conducted during the COVID-19 pandemic to explore whether the department was adhering to NICE guidelines.

**Method:** AKI was defined, as per NICE Clinical Knowledge Summaries, as an increase in serum creatinine levels by 26  $\mu\text{mol/L}$  or greater. Data was collected prospectively starting from December 2020 to February 2021 in the Princess Royal Hospital during the COVID-19 pandemic. All patients with NOFs were included and data on sex, age, comorbidities, and type of surgery were collected.

**Results:** In total, 32 patients were included in the audit with an average age of 82 years; of these, eleven patients had dynamic hip screws and eighteen patients had hemiarthroplasties. Five patients had chronic kidney disease, six patients had previous myocardial infarctions and thirteen patients had hypertension. Two patients (6.3%) were found to have an AKI post-surgery with increased creatinine levels of 27 and 28  $\mu\text{mol/L}$ . Both had hypertension and underwent hemiarthroplasties.

**Conclusions:** Complications such as AKIs are reversible and preventable. Especially during the COVID-19 pandemic such complications can increase morbidity and mortality of patients suffering from NOF leading to longer hospital stays. The low rate of AKI following NOF repair in our Department of Trauma and Orthopaedic is attributable to adherence to NICE and BOAST fluid resuscitation guidelines.