P 03 **AUDIT OF PAEDIATRIC SICKLE PAIN MANAGEMENT AND CODEINE USE IN CHILDREN**

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10.1136/archdischild-2015-308634.11

Aim To evaluate incidences and management of acute paediatric sickle cell pain, and outcomes of safety and efficacy of codeine in patients at North Middlesex University Hospital (NMUH).

Method A retrospective audit was performed on all admissions with diagnosis of sickle cell pain from January to December 2013. Case notes of 54 patients were reviewed using pre-specified audit criteria in a data collection tool. Types of analgesics administered at home and in the accident and emergency (A&E) department and pain scores were recorded where available from the case notes. Particular attention was paid to the use of codeine and outcomes of efficacy and safety.

Results Over the one-year period, 91 admissions were recorded. The average age of the population was 6.6 years (±4.1), with the majority (45%) of the population aged between 1 and 5 years. The most prevalent haemoglobinopathy was HbSS (82%), followed by HbSC (13%) and β-thalassemia (4%). The majority of patients (61%) had a single painful crisis admission, 33% had 2–3 admissions, and the remainder presented with four or more admissions in the year.

The audit revealed that most patients (93%) received one or more analgesics prior to admission, although the drug of choice varied, with paracetamol and ibuprofen been the most frequently utilised combination (43%) and 22% received opioids (20% had codeine). Similar to the pre-admission trends, a wide range of analgesics were utilized at the Trust, with the majority of patients receiving paracetamol and ibuprofen combination. However, the doses utilized at home were significantly less than those given on admission, suggesting inadequate pain management at home. Codeine was given in 37% of the cases after admission and it was observed that patients who received codeine had significantly higher initial pain scores on admission compared with those who did not receive codeine. There were also greater reductions in pain scores recorded post analgesia although accurate inferential statistics could not be carried out due to incomplete documentation of pre and post medication pain scores.

In addition, the audit revealed compliance with guidelines was poor, particularly as documentations were mostly incomplete/not done. Although up to 82% documented fluid balance, only 7.7% recorded pain scores appropriately on the assessment scale, while 36.3% and 28.6% utilised the first hour sheet and fast track forms respectively (local assessment documentation sheets). Similarly, the time of assessment, analgesia and reassessment were recorded in 29%, 36% and 5.5% of cases respectively.

Conclusion The current audit revealed that only 2% of the admissions for sickle cell pain crisis at the Trust in 2013 met all criteria specified in the local and national guidelines for management of the condition. This was mostly attributed to poor documentation of assessments. In addition, clear analgesic benefits could not be demonstrated for codeine use with regards to the outcome of efficacy.

According to the main outcome of the audit, efforts need to focus on increasing awareness of the objectives of utilisation of Trust documentation sheets to facilitate prompt and appropriate management.