

14th World Pediatrics & Neonatal Healthcare Conference

September 11-12, 2017 Los Angeles, CA, USA

<http://pediatrics.cmesociety.com>

Emergency management of SCD pain crises: Current practices and playing variables

Almuqamam M¹, Diaz – Frias J¹, Malik M¹, Mohamed AA² and Sedrak A¹

¹The Brooklyn Hospital Center, USA

²University Hospitals of Leicester NHS Trust, UK

Introduction/Objectives: Acute pain episode is a common reason for patients with sickle cell disease to present to the ER. This study is designed to assess the role of multiple factors that might affect the time from ED triage to the administration of the first opiate pain medication and its dosage, to compare current practices with the American Pain Society Guideline for the Management of Acute and Chronic Pain in Sickle-Cell Disease in the emergency department. By identifying and recognizing some of the factors that delay or affect the proper dosing of the pain medications, we aim to implement suitable and plausible changes to ensure better emergency care for these sickle cell disease patients.

Methodology: This is a cross-sectional descriptive study that relied on collecting non-identifiable data from the local EMR to assess for possible relationship between the proposed set of factors/variables and the time to administration of the 1st narcotic pain medication and its dosage. The population in question includes the entire sickle cell disease patients' population (HB-SS, HB-SC, HB-SD, HB-SB⁺ and HB-SB⁰) that are under the care of our Pediatric Heme-Onc clinic at The Brooklyn Hospital Center (TBHC) with the age range of 1 day to 21 years. The factors include age, gender, pain assessment/scale, time of presentation, mode of arrival, presence or absence of IV access at presentation, and ESI acuity. SPSS program was used for statistical analysis and treatment with a pre-set P-value at 0.05.

Results: There were 259 patient ER visits with 148 unique patients. Mean (SD) age of the entire study population was 15.98 (+/- 4.08) years and 61.8% of the patients were females. Average time to 1st opiate pain medication was 120.27 minutes (SD +/- 78.4) and average doses of Morphine and Hydromorphone were 0.067 mg/kg and 0.053 mg/kg respectively. Longer waiting time to 1st opiate pain medication were found in females with a mean difference of 25.5 minutes (95% CI 20 – 80.5 *P value 0.027*), older patients and patients with least severity ESI score (correlation coefficient of 0.214 & 0.134 (*p values of 0.001 and 0.031*) respectively). On the other hand, there seems to be a negative correlation between the time to 1st opiate and the pain score with a negative correlation coefficient of -0.22 (*p value of <0.001*).

Conclusion: Overall, patients with acute SCD pain experienced significant delays when seeking pain relief in the ED. The following patients experienced the longest delays: those assigned a lower triage priority level, female patients, patients with lower pain score and older patients.

Biography

Mohamed Almuqamam has completed his MD at the age of 23 years from the Royal College of Surgeon in Ireland (RCSI-Bahrain). He is a graduate of the UK Foundation School in Malta 2014-2016 and is currently a PGY2 Pediatric resident at The Brooklyn Hospital Center.

m.almuqamam@live.com

Notes: