Evaluation of Opioid Use in an Urban Outpatient Hospital-Based Hemodialysis Unit

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Problem: Patients referred to our outpatient hospital-based hemodialysis unit have complex medical conditions that impact their ability to be dialyzed safely and comfortably in chairs. These disabilities often require more aggressive pain control than is typically available in free-standing dialysis units. The purpose of this study was to investigate the utilization and effectiveness of opioids for pain management in our unit.

Methods: A retrospective chart review was performed on the 138 patients in our unit between January 1 and 31, 2013. Patients included were at least 18 years old who were ordered at least one dose of an opioid analgesic during a dialysis session. Data gathered included demographics, comorbid conditions, opioid type and dose, pain location, and numeric pain scale data pre- and post-administration.

Results: Thirty-eight (27.5%) of the 138 patients were ordered an opioid. The majority of patients were male (58%) with a mean age of 53.5 years. Patients had a mean of five comorbid conditions in addition to ESRD. Oxycodone/acetaminophen was prescribed most commonly (57.9%) followed by hydromorphone (34.2%) and combination therapy with oxycodone/acetaminophen and hydromorphone (7.9%). The most common reported pain location was lower extremities (40%). Of the 32 (23.2%) patients who received at least one opioid dose, the median pain score pre-administration was 8/10 (range 2-10) and the median pain score post-administration was 4/10 (range 0-10). The mean opioid dose administered was the oral morphine equivalent of 20 mg per session.

Conclusion: Approximately one quarter of our population received an opioid for pain management during dialysis resulting in a 50% reduction in pain score. Nonetheless, the range of pain scores, pain location, and medications used raise questions about how we assess and select therapy for our patients. As a result of this study, we plan to implement a multidisciplinary program to address pain management in our population.

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