Integration of Life Care Specialists Into Orthopaedic Trauma Care: A Pilot Study

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Purpose: Orthopaedic trauma patients are frequently prescribed opioids, leaving them at risk for ongoing opioid use and developing opioid use disorder. To date, post-trauma pain management has placed little emphasis on individualized risk assessment and non-pharmacologic approaches. Therefore, we assessed the feasibility of integrating a Life Care Specialist (LCS) into orthopaedic trauma care.

Methods: The LCS is a hybrid between a behavior-based "pain coach" and substance use disorder counselor, offering evidenced-pain management education, opioid risk assessment, coordinated care management, and harm-reduction strategies (Narcan education), with an emphasis on mental wellness using models developed by the Trauma Resource Institute. Selected patients (>18 years) received supplemental care by an LCS at a Level I trauma center. The Opioid Risk Tool (ORT), Patient Health Questionnaire 2-item (PHQ-2), and social determinants of health and substance use (SDOH) survey were completed prior to LCS intervention. Daily morphine milligram equivalents (MME) during inpatient hospitalization, opioid use at 2 weeks postoperatively, and patient satisfaction were recorded.

Results: 122 patients (60% male, mean age: 37.3 ± 13.3) were enrolled. The mean MME/day was 41.7 ± 36.9. Patients met criteria for moderate to severe risk of opioid misuse (39%) and probable depression (11.5%) during initial hospitalization. On average, 1.7 LCS pain management interventions were utilized (most frequently used: progressive muscle relaxation [37.7%], sound therapy [31.1%]). Postoperative outcomes indicated that prescription opioid utilization was low (12.5% of participants) and that opioid-related overdose was infrequent (1.6%). 99% of patients agreed that the LCS was helpful in managing pain.

Conclusion: The findings indicate feasibility of integrating an LCS into orthopaedic trauma care. Compared to previous work in the institution, the average MME/day was approximately 20% lower during the initial trauma hospitalization with LCS intervention. Future randomized controlled trials are needed to cultivate this patient-centered care approach to pain management and opioid-related risk mitigation.