

## **Opioid Use After Discharge Following Primary Unilateral Total Knee Arthroplasty: How Much Are We Overprescribing?**

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**Introduction:** The opioid crisis in America has resulted in increased pressure on orthopaedic surgeons to reduce the amount of narcotics prescribed for postoperative pain management. This study sought to quantify postoperative opioid use after hospital discharge for primary unilateral total knee arthroplasty (TKA) patients.

**Methods:** A prospective cohort of primary unilateral TKA patients by one of five senior fellowship trained arthroplasty surgeons were enrolled at a single institution. Detailed pain journals tracked all prescription and over-the-counter pain medication, quantity, frequency, and visual analog scale (VAS) pain scores. Narcotic and narcotic-like pain medications were converted to morphine milligram equivalents (MME). Statistical analysis was performed using student t-tests with  $<0.05$ .

**Results:** Data from 89 subjects was analyzed; the average VAS pain score was 6.92 while taking narcotics. The average number of days taking narcotics was 16.81 days. The distribution of days taking narcotics was “right-shifted” with 52.8% of patients off narcotics after 2 weeks, and 74.2% off by 3 weeks postoperatively. The average MME prescribed was significantly greater than MME taken (866.6 vs. 428.2,  $p<0.0001$ ). The average number of narcotic pills prescribed was significantly greater than narcotic pills taken (105.1 vs. 52.0,  $p<0.0001$ ). The average excess narcotic pills prescribed per patient was 53.1 pills. 43 (48.3%) patients took fewer than 40 narcotic pills; 67 (75.3%) patients took fewer than 75 narcotic pills. 4 (3.4%) patients did not require any narcotics; 36 (40.5%) patients required a refill of narcotics. 8 (9.0%) patients went home the day of surgery.

**Conclusions:** Significantly more narcotics were prescribed than were taken in the postoperative period following TKA, with an average 53.1 excess narcotic pills per patient. Adjusting prescribing patterns to match patient narcotic usage could reduce the excess narcotic pills following TKA.