

# A RETROSPECTIVE CHART REVIEW TO EXPLORE THE DIFFERENCES IN OPIOID NAÏVE AND TOLERANT PATIENTS

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## Background

**Introduction:** Patients who are opioid tolerant are difficult to manage perioperatively for pain while maintaining patient safety.

- **Opioid Naïve:** An opioid naïve person has not recently taken enough opioid on a regular basis to become tolerant to the effects of an opioid (Pasero & McCaffery, 2011)
- **Opioid Tolerant:** an opioid tolerant person has taken opioids long enough at doses high enough to develop tolerance to many of the effects of the opioid. A patient is considered opioid-tolerant if pt. received opioids for 1 week or longer (FDA).

**Purpose:** The goal of this research was to explore the differences in opioid naïve and tolerant patients to develop a protocol for patients.

## Methods

- **Design:** Retrospective descriptive study.
- Sample:** Neurospine patients were chosen randomly using most recent patients who were opioid tolerant or naïve.
- **Measurement:** An Excel spreadsheet was used to collect data variables.
- **Data Collection:** Patient data was pulled from electronic medical record through chart review.
- **Data Analysis:** Sample groups were analyzed using frequency tables and t-tests.

## Results

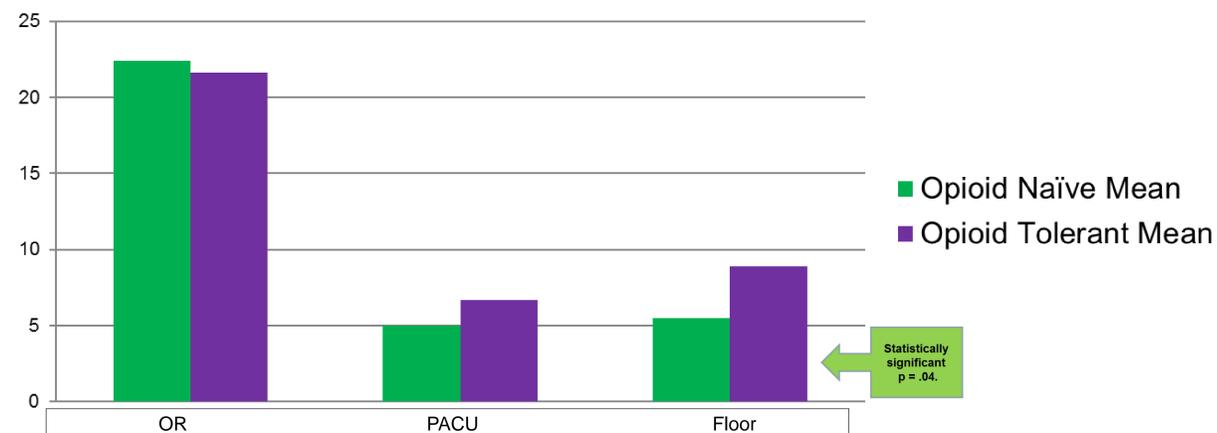
- There were 23 patients in the opioid naïve group and 19 patients in the opioid tolerant group.

**Demographics**

	Total (N=42)	Naïve (n=23)	Tolerant (n=19)
Age Mean (St. Dev.)	61.4 (11.9)	61.4 (11.8)	61.5 (12.4)
Sex- Female (%)	27 (64)	17 (74)	10 (53)
Procedure Type (%)			
Cervical	18 (43)	12 (52)	6 (32)
Lumbar	24 (57)	11 (48)	13 (68)
History of OSA –No (%)	40 (95)	22 (96)	18 (95)

- On average, the morphine equivalent for the opioid tolerant group was higher with the exception of the opioids received in the operating room.

**Morphine equivalents by area and type of patient**



- The only area that had a statistically significant higher morphine equivalent mean was within 8 hours on the floor with the opioid tolerant patients receiving a morphine equivalent of 8.9mg on average as compared to 5.5mg opioid naïve patients of a morphine equivalent of mg,  $p = 0.04$ .

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## Discussion

- There was not a difference in the amount of opioids used for patients who were opioid naïve and tolerant in the OR, which was not an expected outcome and led to a review of the processes for identifying patients who are opioid naïve or tolerant. Knowing what the differences are between these groups empowers nurses to add additional monitoring to patients for the naïve or tolerant patient.
- Due to little differences found during the perioperative stay, the team explored their current assessment techniques to reevaluate the care they are providing.

## Conclusion

- New definitions for opioid tolerant, separating acute and persistent pain were developed and approved at this facility as a result. These include:
  - Opioid naïve
  - Opioid Tolerant with Acute Pain
  - Complex: Includes opioid tolerant with persistent pain, opioid dependent and those with a known addiction disorder.
- Further research is needed to address the assessment needs and requirement differences which will aid in the care of patients through a better understanding of their opioid requirements, response and monitoring.