

The Opioid Square: A New Way to Learn Opioid Conversions



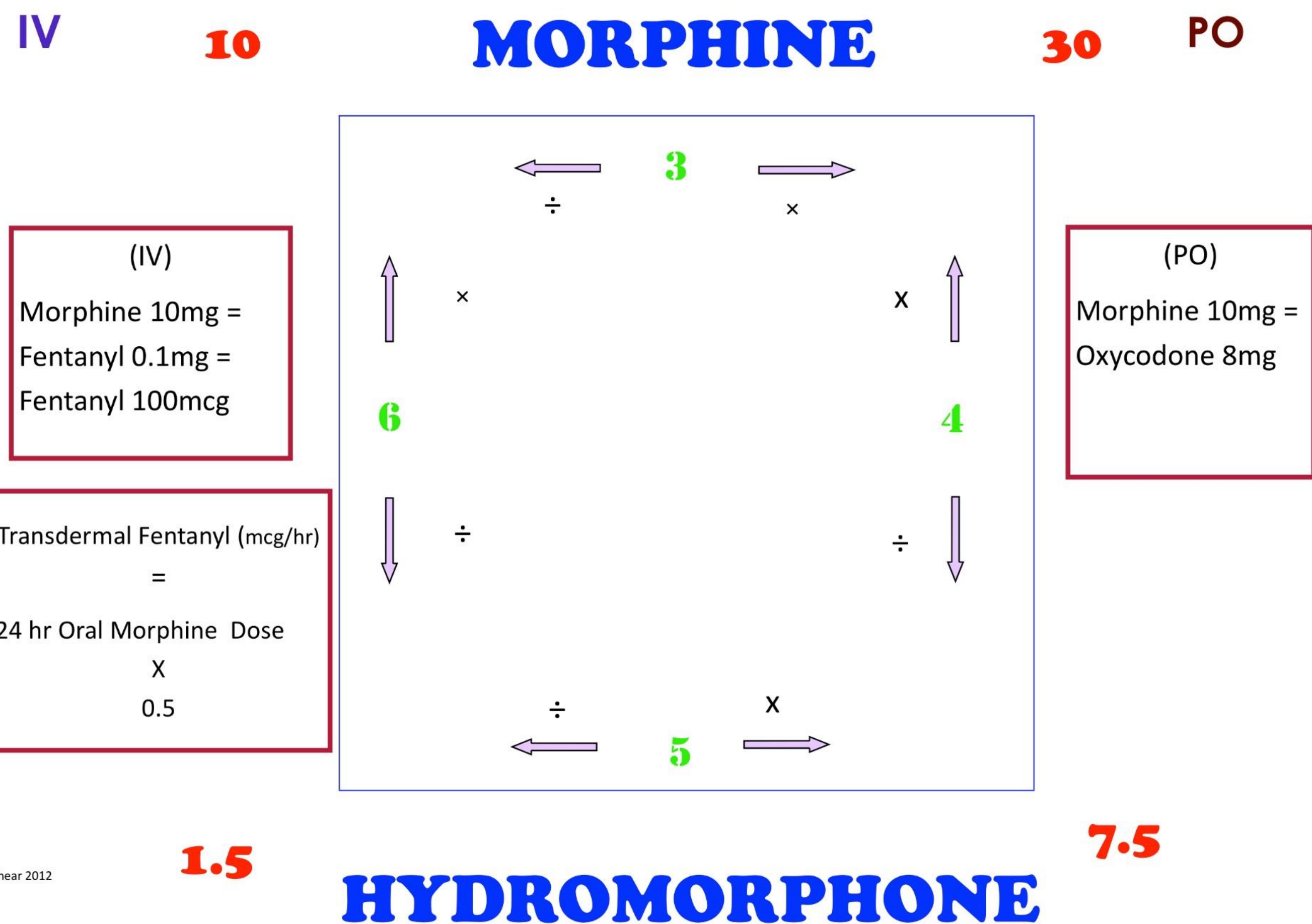
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EQUIANALGESIC OPIOID DOSING BOX



Objectives:

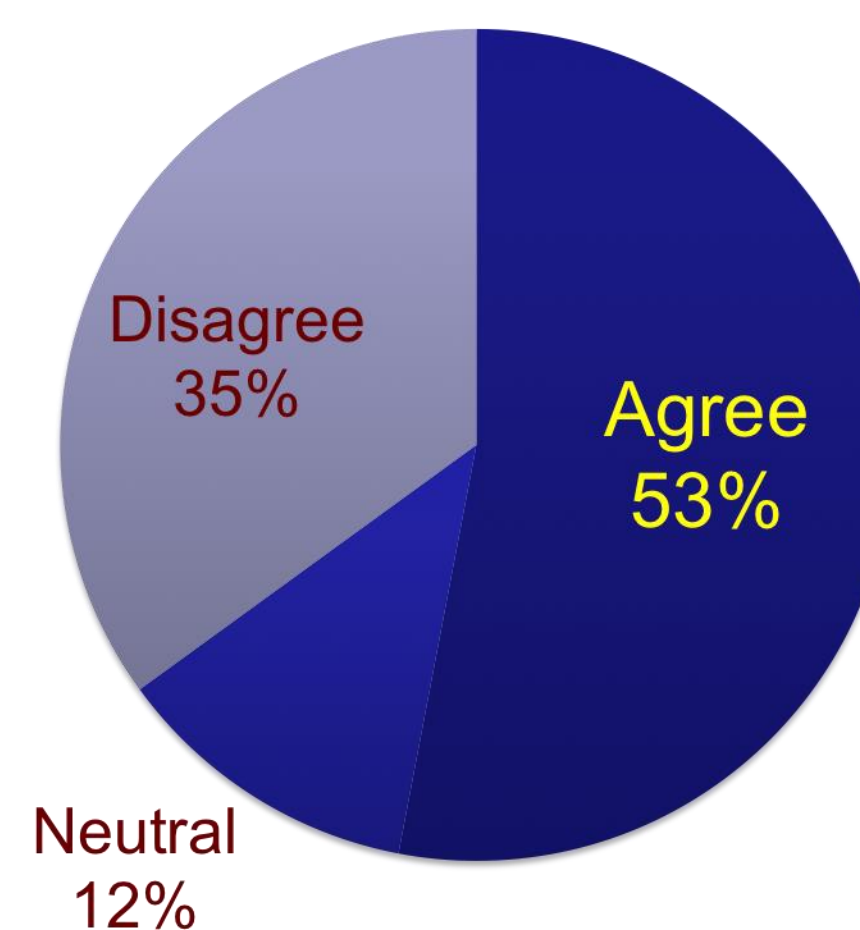
The Opioid Square tool was evaluated in comparison to a classic conversion table in a single 2nd year medical school class, assessing both accuracy in making opioid conversions and preference for each tool.

- Determine the degree to which the Opioid Square tool assists 2nd year medical students to correctly calculate opioid conversions
- Evaluate 2nd year medical student's preference to use the Opioid Square in comparison to the classic equianalgesic tables to calculate opioid conversions.

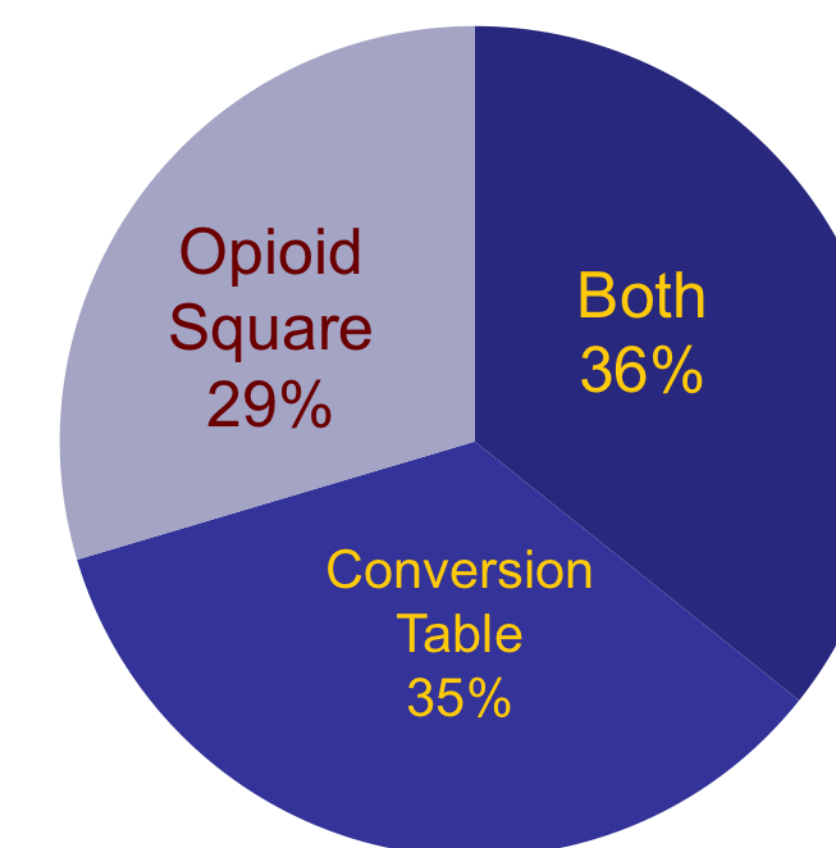
Results

- 187/200 students completed study
- Accuracy of conversion questions generally good (85-100% correct)
- **No statistical differences in accuracy between Opioid Square and conversion table**

"For this exercise, I preferred the Opioid Square over the Conversion Table"



"Which tool will you use in the future?"



Discussion

- Providing an alternative visual tool to the classic opioid conversion table was well received by students in this study.
- Study is limited to single institution in only 2nd year medical school class
- Future study may include evaluation in post graduate housestaff, faculty, or nursing students

Conclusions

- The Opioid Square tool is not inferior to the classic opioid equianalgesic table for helping students make accurate conversions.
- Many students preferred the Square. This tool may provide educators with an alternative visual framework for teaching conversions.

References

- ¹Gordon, D. B., et al. (1999). Opioid equianalgesic calculations. *Journal of Palliative Medicine*, 2(2), 209-218.
²Philip E. et al. Errors in Opioid Prescribing: A Prospective Survey in Cancer Pain. *Journal of Pain and Symptom Management*, 39(4), 702 - 711

Background

- Equianalgesic conversions between opioid drugs and oral and intravenous formulations are a clinically important skill, for all practitioners who treat pain¹.
- Accuracy is critical to preventing adverse events². Opioid conversion tables are a commonly used tool for teaching this skill, however needs assessment at our institution reveals the classic conversion table is sometimes difficult for learners to understand.
- A novel visual tool, the Opioid Square was developed to provide a different visual framework for opioid conversions.

Methods

- The sample consisted of 200 students at a single academic institution who were learning opioid conversions for the first time during their Pharmacology class.
- Students were taught conversions using both the standard conversion table, and the Opioid Square method. An eight item conversion quiz followed, on various opioids and formulations of each.
- Students were allowed to use either tool and preferences were assessed with qualitative comments.