



Photo: Pixabay

HOT TIP
September
2023

Northern Health Palliative Care

Opioid Titration

Opioid titration has traditionally been referred to as adjusting the dosage of an opioid. It requires regular assessment of the patient's pain, when and why it occurs as well as the amount of medication used in the previous 24 to 72 hour period.

Titration Quick Tips:

- Dose adjustments generally should not be made more than every 24 hours for immediate release formulations as it takes up to 24 hours to reach a steady state after an adjustment.
- Reassess dose of regular opioids when more than 3 breakthrough doses (BTD) are consistently used in a 24-hour period.
- Total all the regular and BTD used in the last 24 hours to determine what the new Total Daily Dose (TDD) should be.
- Divide the TDD by the number of doses scheduled for the next 24 hours (i.e. q4h = 6) and give this dose regularly (q4h) and use 10% of the TDD as a breakthrough dose (q1h prn).
- BTDs should be IR formulations of the same opioid used for the regular dose where possible.
- When good pain control is achieved with a stable dose of IR medication, consider use of long-acting formulations to improve compliance and reduce pill burden.
- Adverse effects such as drowsiness and nausea can be expected when increasing the dose of opioid but should dissipate in 48-72 hours as the patient adjusts to the new dose. To minimize symptoms, ensure bowel protocol and PRN anti-emetics are also ordered.

Titration Calculation:

- Calculate total daily dose (TDD) for the past 24 hours: $TDD = \text{Regular} + \text{all BTD}$
- Regular dose q4h for the next 24 hours = $TDD \div 6$
- Breakthrough dose (BTD) = $TDD \times 10\%$
 - Increase the opioid BTD proportionately whenever the regular dose is increased.