



ST VINCENT'S  
HEALTH AUSTRALIA

# MATOD and the Management of Acute Pain

Victorian Opioid Management ECHO  
Department of Addiction Medicine  
St Vincent's Hospital Melbourne 2018

UNDER THE STEWARDSHIP OF MARY AIKENHEAD MINISTRIES

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## **Methadone**

**high vs low dose**

**High dose- may be effectively providing opioid blockade**

## **Buprenorphine/Buprenorphine/Suboxone**

**high vs low dose**

**High dose will effectively block effect of opioids**

## **Hyperalgesia**

**ivdu**

## **Role of other agents**

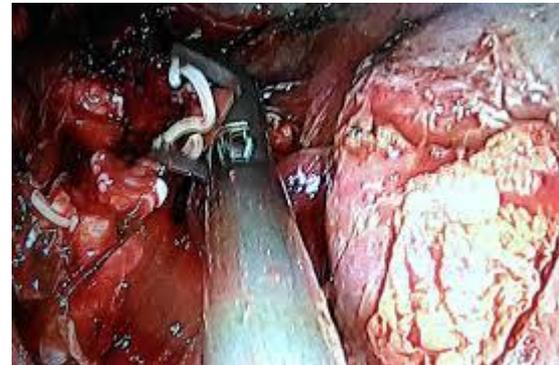
# Acute pain

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# pathophysiology

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# Remember

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**Pharmacodynamic Drug Interactions = what the drug does to the body**

**Most methadone-related deaths occur in conjunction with other CNS depressants**

**opioids**

**benzodiazepines**

alcohol (combination of non-fatal doses of both may lead to fatal effect)

tricyclic antidepressants (TCAs) – respiratory depression, pulmonary oedema, QTc

# Methadone Toxicity

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Usual triad of opioid toxicity (respiratory depression, pinpoint pupils, coma) may be preceded by:

Drowsiness

Slurred speech

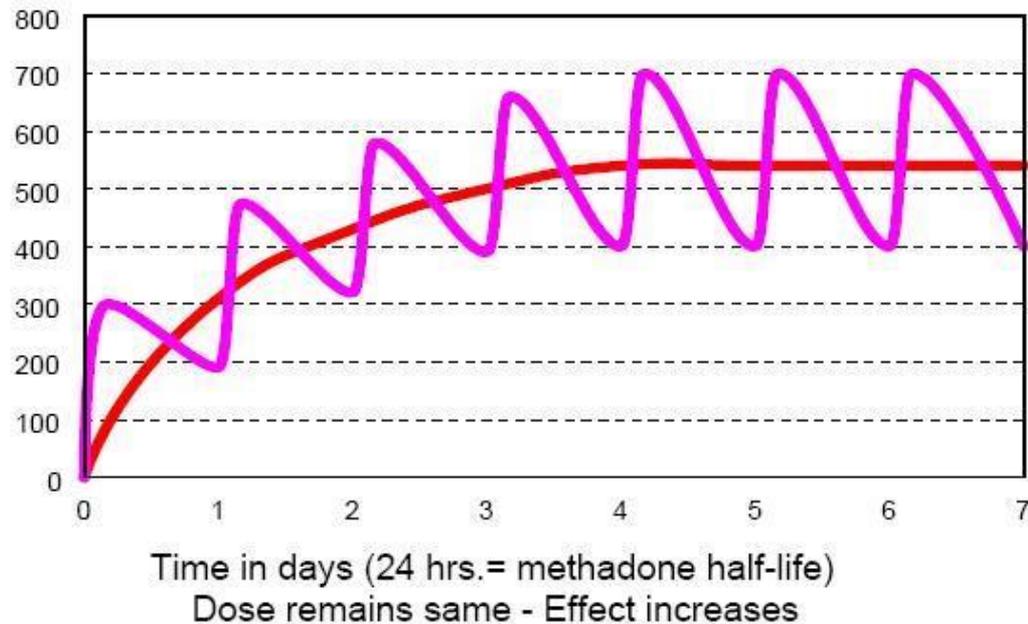
Poor balance (unsteady gait)

Note: additive effects of other sedatives

Due to methadone's unique pharmacokinetics – long time between ingestion and maximum effect, and  $t_{1/2}$  (leading to accumulation in tissues)

## Steady State Simulation - Methadone Maintenance

Steady State attained after 4-5 half-lives - 1 dose every half-life



In the graph above the wavy line represents the blood levels of methadone as well as the "effect" it has on the individual patient.

# Managing pain in pt on methadone

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## Low dose

Can add in any appropriate SHORT-ACTING analgesic(s)

Consider splitting dose

Monitor for sedation etc.

Aim to wean back to usual dose and treatment quickly

## High dose

More complicated

Can split dose

Add non-opioid analgesia

Consider frequent doses of SHORT-ACTING opioids as well as non-opioid treatments

May need to up-titrate methadone to enable weaning of other opioids

# Severe pain

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**Consider admission for pain management**

**Involving APS early**

**NSAIDs- Ketoralac (10-30mg deep imi q4-6 hrs, max 90mg/day)**

**Regional blocks**

**Local blocks**

**Intravenous ketamine**

**Tramadol**

**Tapentadol**

**USE SHORT-ACTING OPIOIDS ONLY (AVOID SR/LA PREPARATIONS)**

# buprenorphine

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**Inclusion of naloxone is irrelevant**

**Need to consider cause of pain, severity, likely duration in determining management**

**Always consider non-opioid options- local/regional anaesthesia, NSAIDs, ketamine**

## **Options:**

**if low dose continue buprenorphine and add in pure opioid agonist**

**increase buprenorphine, split dosing**

**transfer to pure opioid agonist**

**stop buprenorphine and use other opioid**

**ketamine**

**general anaesthesia**

# buprenorphine

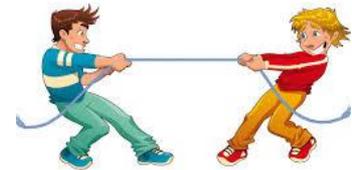
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**When weaning additional opioids may need to increase buprenorphine dose**

**If buprenorphine ceased then will need to allow washout period before recommencing**

**May have to transfer to methadone**

**Sometimes challenging to get patients to accept going back onto ORT (MATOD)**



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