

**PP148 WAKE ME UP, DADDY!**  
**(Effect of methadone toxicity in paediatric age group)**

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**INTRODUCTION:**

Methadone ingestion can occur accidentally due to non-standard prescription, negligence or improper storage which can lead to methadone poisoning and death.

**CASE REPORT:**

A 3-year-old girl presented to emergency department (ED) with complaint of drowsiness post ingestion of 15mg syrup methadone which was mistaken as antipyretic by her father. One hour post ingestion, her father noticed his child appeared drowsy and breathless. Upon presentation, her Glasgow Coma Scale (GCS) was E3V4M5, and she was unable to maintain adequate oxygenation under room air. She was supported with 2L/min oxygen via nasal cannula and intravenous (IV) naloxone 1.5mg (0.1mg/kg) was administered. She regained full consciousness and saturation maintained under oxygen supply. Four hours later, her GCS dropped again to E3V2M6. Thus, second dose of IV naloxone 1.5mg was given. No more episode of desaturation or altered mentation after second dose of naloxone.

**DISCUSSION:**

Methadone is a mu-agonist, a synthetic opioid that commonly prescribed as analgesia and maintenance therapy for opioid addiction. The actions are similar to morphine which most prominent involves the central nervous system. Methadone has long half-life and with dosage of 1mg/kg can cause lethal to the children. The adverse effects are respiratory depression, decreased bowel motility, miosis, nausea and hypotension. A Naloxone is opioid antagonist which acts as a reversal to opioid side effects. Initial dose of 0.1 mg/kg IV naloxone in children under five years old or less than 20kg is recommended. Onset of

action after IV dosing is within 2 minutes and the duration of action for naloxone is shorter than most of opioids. Thus, additional dose might be required to maintain reversal.

**CONCLUSION:**

There was no reported death secondary to methadone poisoning but the risk of apnea and respiratory depression were significant. Proper labelling and storage is crucial to prevent unnecessary ingestion especially in paediatric.