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Effectiveness of naltrexone in methadone poisoning in pediatrics department, Loghman Hakim Hospital.

Hossein Hassanian-Moghaddam¹, Narges Gholami², Fariba Farnaghi² Maryam Saberi², Nasim Zamani³, Rebecca McDonald⁴.

¹*Department of Clinical Toxicology, Shohada-e Tajrish Hospital, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran*

²*Department of Pediatrics, Loghman Hakim Hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran.*

³*Department of Internal Medicine, Saint Agnes Medical Center, Fresno, CA, USA.*

⁴*SERAF, Norwegian Centre for Addiction Research, University of Oslo, Oslo, Norway*

Aim and objectives: The prevalence of poisoning from methadone and prescription opioids is increasing in pediatric populations. Naloxone is the main antidote for treatment. Long-acting opioid toxicity may need close observation in the intensive care unit (ICU). In our previous study, naltrexone prevented re-narcotization in methadone-poisoned adults. Here, we aim to share our experience with the use of oral naltrexone for preventing recurrence of toxicity in opioid-naïve children.

Methodology: In a single-center, retrospective case series, children (age ≤ 12 years) admitted to a poison center in Tehran (Iran) between March 2014–March 2016 were included if they presented with methadone poisoning and received naltrexone treatment in hospital. Naltrexone (1 mg/kg) was administered orally after initial administration of 0.1 mg/kg naloxone intravenously. Children were monitored for level of consciousness, cyanosis, respiratory rate, VBG results, and O₂ saturation for ≥ 48 h during their hospitalization.

Results: Eighty patients with methadone poisoning were enrolled, with median age of three years (range: 0.2–12.0). None involved polysubstance poisoning. Following naltrexone treatment, none experienced recurrent opioid toxicity during hospitalization, and hospital records indicated no readmission within 72-h post-discharge.

Conclusions: Oral naltrexone could be a potential substitute for continuous naloxone infusion in methadone-poisoned children and reduce the need for ICU care.