

High opioid doses associated with risk of road trauma among drivers in Ontario

Adult drivers in Ontario who were dispensed moderate to high doses of opioid medications were up to 42% more likely to experience an injurious road accident than people who were taking lower doses of these drugs.

What does this mean?

- Drivers dispensed higher doses of opioids were more likely to visit the hospital with injuries from motor vehicle accidents than drivers who were dispensed lower doses of opioids.

Policy Implications

- ✓ Taking high doses of opioids can affect driving ability. Considerations should be made to provide warning labels or information pamphlets alongside opioid prescriptions to notify patients of potential driving impairment.

How do we know this?

The ODPRN conducted a population-based study on patients aged 18 to 64 eligible for Ontario public drug coverage. Cases were dispensed oral codeine, morphine, oxycodone, hydromorphone, or transdermal fentanyl patches for a period of time overlapping with an ED admission for road trauma between April 1, 2003 and March 31, 2011. Controls were matched to cases, but did not have an ED admission for road trauma during the study period. Dose was stratified into 5 categories (very low, low, moderate, high and very high) based on morphine equivalents (MEQs). In the primary analysis, there was no association between escalating dose and road trauma. In a sub-group analysis of drivers only, escalating dose increased the odds of visiting the ED with road trauma; low, moderate and high dose users were 21, 29 and 42% more likely to experience road trauma than very low dose users, respectively (adjusted odds ratio (aOR) 1.21, 95% confidence interval (CI) 1.02 – 1.42; aOR 1.29, 95% CI 1.06 – 1.57; aOR 1.42, 95% CI 1.15- 1.76, respectively), although attenuation in this risk was noted among patients prescribed very high doses (over 200 MEQ). In a secondary analysis, there was no difference in risk of road trauma between new opioid users and long-term users of opioids.

Gomes T, Redelmeier DA, Juurlink DN, Dhalla IA, Camacho X, Mamdani MM. Opioid dose and risk of roadtrauma in Canada: a population-based study. *JAMA Intern Med.* Published Online First: 14 January 2013.

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