



Letter to the Editor

Reply to: Opioid overdose causes arrhythmia and increased mortality: Consider individual agents and related factors

Rajkumar Doshi ^{a,*}, Jay Shah ^b, Rupak Desai ^c, Nageshwara Gullapalli ^a^a Department of Internal Medicine, University of Nevada Reno School of Medicine, Reno, NV, USA^b Department of Internal Medicine, Mercy St Vincent Medical Center, Toledo, OH, USA^c Department of Cardiology, Atlanta VA Medical Center, Decatur, GA, USA

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We appreciate the comments made by Thakkar et al. [1] on our article showing the burden of arrhythmias with opioid overdose [2]. We agree that we did not have a clear definition for “Opioid Overdose” in our study; however, we have utilized a specific code for an opioid overdose which has been previously used [3]. The dose differs for various opioid medication overdose, and it also varies from person to person. We also agree with the author that different opioid medications have different arrhythmogenicity. Previous studies demonstrated that methadone has the highest risk of arrhythmias and opium consumers are a greater risk of arrhythmias including atrial fibrillation [4]. We observed that overall arrhythmia rates were 37.7 per 1000 opium overdose admission, 23.8 per 1000 heroin overdose, and 35.8 per 1000 methadone overdose in this study. New-onset atrial fibrillation rates were 29.4 per 1000 opium overdose, 20.4 per 1000 heroin overdose and 20.9 per 1000 methadone overdose. Even though the previous study demonstrated higher rates of mortality with heroin compared to methadone

as cited by Thakkar et al., we did not observe similar higher event rates of mortality in this study. We found higher in-hospital mortality with opium as compared to methadone. However, most patients were coded as other opiates and related narcotics in our study which may be one of the reasons for this significant difference. Future studies should be directed towards showing arrhythmogenicity of each individual agent's dose and incidence of arrhythmias including atrial fibrillation. Finally, we do not have information on other drugs that were consumed with opioid and management of these arrhythmias were also not included given nature of the database.

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None.

Conflict of interest

None.

References

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* Corresponding author at: Department of Internal Medicine, University of Nevada Reno School of Medicine, 1155 Mill St, W-11, Reno, NV 89502, USA.
E-mail address: rdoshi@med.unr.edu (R. Doshi).