LETTER TO THE EDITOR

The Editor Pakistan Journal of Medical & Health Sciences

Comment on "Comparison of Thiopental Sodium and Lidocaine to Prevent the Pain Associated with Propofol Injection"

I have a comment on the research by Azam¹. I am extremely grateful for detailed study in Lahore, Pakistan. The author investigated the effect of thiopental on pain reduction of propofol. Thiopental is popular and widely using drug in operating room. I have some additional point about caution of thiopental as followings:

First, mixing thiopental and rocuronium produce a flaky precipitate². No fluid running is the main cause of crystal formation.

Second, intraarterial injection of thiopental leads to gangrene³. Inadvertent injection usually occurs in radial artery.

Third, extravasation of thiopental generates collagen destruction, vasoconstriction, apoptosis and edema⁴. Sodium thiopental is a strong alkali, pH 10-11. This error also reaches deep tissue necrosis.

REFERENCES

- 1. Azam M, Rashid M, Younis M, Butt TA. Comparison of thiopental sodium and lidocaine to prevent the pain associated with propofol injection. *Pak J Med Heal Sci* 2020;14(2):343-345.
- 2. Khan S, Stannard N, Greijn J. Precipitation of thiopental with muscle relaxants: a potential hazard. *J R Soc Med Sh Rep* 2011;58(2):1-2.
- 3. Dundee JW. Intraarterial thiopental. Anesthesiology 1983;59(2):154-155.
- 4. Reynolds PM, MacLaren R, Mueller SW, Fish DN, Kiser TH. Management of extra vasation injuries: A focused evaluation of non-cytotoxic medications. *Pharmacotherapy* 2014;34(6):617-632.

Thank you.

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