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Quick response code



Need to replace codeine for management of paediatric post operative pain

Sir,

We read the review 'Postoperative anaesthetic concerns in children: Postoperative pain, emergence delirium and postoperative nausea and vomiting'^[1] with great interest and found it to be very informative.

We would like to bring to the readers' attention that while codeine has regularly been used for management of post-operative pain and has been mentioned as safe for children more than 3 years in this review, on April 20, 2017 the FDA issued its strongest warning – a contraindication for its use for pain in children less than the age of 12.^[2] This has resulted from drug surveillance and reports of life-threatening respiratory depression associated with codeine over the past two decades. A number of organisations including the world health organisation (WHO) in 2011, Health Canada in 2013, and European Medicines Agency in 2015 have also issued warnings against the use of codeine in the paediatric population.^[3]

Codeine is a prodrug that is metabolised via the P450 CYP2D6 to morphine and its metabolites. Due to genetic polymorphism and a large number of alleles coding for the enzyme there is a wide range in the level of enzyme activity.^[4] Clinically this translates to a spectrum where on one end there are children who are poor metabolisers and are deprived of adequate analgesia. The other extreme is more concerning as it comprises children who are ultrarapid metabolisers and have supratherapeutic levels of morphine, which leads to severe respiratory depression.

Hence we would like to caution the readers against the use of codeine for routine post-operative analgesia and urge them to use alternative modalities for the same.

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Conflicts of interest

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