

Dextromethorphan: Problems with Formulations

Dextromethorphan is a commonly used antitussive drug in children. Recommended dose of dextromethorphan is 1-2 mg per kg per day [1]. As such there should be no problem in recommending appropriate doses of cough formula containing dextromethorphan, whenever necessary. Problems may occur due to of the following reasons:

1. IAP Pediatric Drug Formulary, 2012 states 1.25 - 2 mg/kg/dose 4 times a day [2], and not per kg/day in 4 divided doses. It appears to be a printing mistake. Some doctors may inadvertently recommend higher dose.
2. Cough syrups containing dextromethorphan by different manufacturers have different quantity of dextromethorphan per 5 mL of liquid (e.g. 5 mg, 10 mg and 15 mg). Some doctors may not be aware of this fact, which can result in inappropriate dosage of dextromethorphan. Similarly, a pharmacist may substitute the brand which may result in lower or higher dose of dextromethorphan to the child. Lower dose would be in-effective and higher dose can result in adverse reaction.
3. Some manufacturers print recommended dosage according to age group on the bottle. For example, two different brands having different composition of

dextromethorphan (Piriton CS 10 mg/5 mL and Piritexyl 5 mg/5 mL) but recommend same dose (2.5 mL 3-4 times a day) for a child between 2 and 6 years. The manufacturers of cough syrups should not mention dosage at all, so that pediatricians calculate it as per weight of the child.

Any drug can cause adverse reaction in any individual, and doctors have to inform the patients or their caregivers about it. In case of dextromethorphan, in addition to the potential side effects of the drug, the doctors and patients are exposed to problems created by three sources *viz.*, by experts in form of wrong dosage recommendation,; by pharmaceutical industry in making formulations with different quantity of dextromethorphan and wrong dosage recommendations; and by pharmacists in substituting one brand with other brand without checking the quantity of dexomethorphan in substituted brand. Regulatory agencies should ensure that all brands have similar composition with the correct instructions on product insert.

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REFERENCES

1. Gupte S, Gupte N. Pediatric Drug Directory. Antitussives. 8th edition 2014. Jaypee Brothers Medical Publishers: New Delhi. p. 41.
2. Unni JC, Nair MKC, Menon PSN, Bansal CP. IAP Pediatric Drug Formulary 2012, 3rd edition. Mumbai: Indian Academy of Pediatrics. p. 311.

Factitious Bleeding Disorder in a Child: An Unusual Presentation of Munchausen Syndrome

Munchausen Syndrome (MS) is a psychiatric disorder characterized by feigning of symptoms of some physical or mental disorder, by patients [1].

A nine-year-old girl presented with complaints of bleeding from multiple sites. Ten days prior to presentation, the child had complained to her parents of

severe pain in the right breast followed by bloody discharge from right nipple. Similar bleeding was also seen by the parents in other places, including eyes (**Fig. 1**), nose, ears, oral mucosa and umbilicus. The 'bleeding' consisted of few drops and was self-limiting. Rest of the history was unremarkable and there was no obvious psychological stressor. Her vital parameters were stable and the systemic examination did not reveal any abnormal findings.

Blood counts, including hemoglobin, platelet count and peripheral smear were within normal ranges. Liver function tests and coagulation profile were normal. Urine and stool microscopy did not reveal any red blood cells or