

a bolus dose as most preparations in the Indian markets contain 60,000 IU.

We agree that there is a limited evidence on dosage for treatment of rickets in infants; thus the Guideline clearly states that it is based on available evidence from Indian studies and other previously published recommendations, which were pertinent to the Indian circumstances. The authors of the query have quoted two studies that reported a rapid rise in vitamin D after 2-monthly bolus doses. The study by Huynh, *et al.* [4] demonstrated the efficacy of bolus dose vitamin D in newborn infants and concluded that bolus dosing of 50000 IU cholecalciferol achieves higher 25 (OH)D (repletion rates) at around 1-2 weeks of age compared to daily dosing, and they report no hypercalcaemia [4]. This study was on newborns (of mothers who had vitamin D concentrations below 75 nmol/L) and the enrolled infants were not diagnosed with rickets. The other study quoted in the query is by Shakiba, *et al.* [5], which is a randomized trial on 120 healthy breastfed infants. They also conclude that a bolus of 50,000 IU of vitamin D every two months with a routine vaccination program provides ideal serum concentrations of vitamin D [5]. They too do not report hypercalcemia, though the study was in infants who were 2.5-4 kg and did not have rickets.

Regarding the second observation, while it is true that rickets does not occur in the age group of 3-10 years, it is also true that bone accrual takes place throughout childhood, and that peak bone mass is built up by second decade. Also, though evidence for extra-skeletal effects of vitamin D is still not compelling, adequate vitamin D status is advisable at all ages [6]. Further, as mentioned,

the guideline is based on the assumption of minimal sun exposure; children and adolescents receiving adequate sunlight exposure or dietary vitamin D do not require supplementation.

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Treat Worm Infestation Before Proceeding Further in Cases of Anemia

We read with interest the recent publication in *Indian Pediatrics* by Narang, *et al.* [1], and have the following comments to offer:

1. Anemia is commonly associated with Celiac disease [2]. This research article would be useful in making the clinician more aware of possibility of celiac disease in cases of unexplained anemia.

2. The subset of excluded patients does not include information about the patients with worm infestation; although, stool examination was performed in the study. It is an important information because a sizable number of children in our country have worm infestation as an important identifiable cause of anemia [3,4]. If worm infestation is detected, it should be treated before proceeding for any further workup. Other conditions, including celiac disease should be suspected if anemia does not respond to anthelmintic and iron therapy.

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AUTHORS' REPLY

We thank the readers for their interest. In our study, stool examination was done on two consecutive days for identification of parasitic infection. Five cases with iron-deficiency anemia and six controls had worm infestation.

Bleeding manifestations and occult blood loss on stool examination was not seen in any patient. Worm infestation was not an exclusion criteria in our study. Work-up for celiac disease in children with iron deficiency anemia was performed only for the research purpose. For clinical management of anemia, irrespective of presence of worm infestation, oral iron therapy should be the first line of treatment and other conditions should be suspected if anemia does not respond to iron therapy, or may be if anemia is severe, as documented in our study. Moreover, the benefits of anti-helminthic therapy are seen with hookworm infestation, and not with other parasites.

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Pain Control Interventions in Preterm Neonates: Few concerns

We read with interest the recent article by Shukla, *et al.* [1], which concluded that Kangaroo mother care with and without Music therapy (with expressed breast milk) significantly reduces pain on heel-stick as compared to expressed breast milk alone. In this study, authors have combined multiple interventions for reducing procedure-related pain in preterm neonates. In principle, combining different interventions would provide multisensory stimulation (tactile, gustatory, auditory and visual) to the baby and would lead to 'sensorial saturation' that should reduce the perception of pain to noxious procedures [2]. The study is a well-designed randomized controlled trial and addresses a clinically relevant issue. However, we would like to highlight a few concerns:

1. In the present study, after randomization and allocation to a particular group, the desired intervention (Music Therapy) could not be given to one participant, and his group was changed. Instead of changing the group at time of analysis, the participant should have been retained in the same group (Intention-to-treat analysis) or excluded from the analysis (per protocol analysis) [3].
2. The gestational age of the study population mentioned in abstract and the main text is different (26-

36 weeks in abstract and 28-36 weeks in the text).

3. For music therapy, the authors have used flute-based music using mobile phone. Instead of this, the mother could be asked to speak/sing to the infant at the time of painful stimulus. This would be easier to do and would not require any special equipment.
4. One of the exclusion criteria of the study was hypoxic ischemic encephalopathy (HIE), and Sarnat criteria was used to stage HIE. However, Sarnat staging is for neonates >36 weeks of gestational age and not for preterms below 36 weeks [4].

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