Sucrose is effective as an analgesic during infant immunizations (*Pediatrics 2008; 121: e327-334*)

American Pediatric Society, Canadian Paediatric Society, and American Pain Society recommend sucrose as an analgesic in term and preterm infants for pain associated with venepuncture and heel lance. A randomized, placebo-controlled trial was conducted to assess the efficacy of oral sucrose as an analgesic given during routine immunizations in 100 infants, at 2 and 4 months of age, at a pediatric ambulatory care clinic in USA. Participants were randomly assigned to receive 24% oral sucrose (n=38) and pacifier or the sterile water control solution, 2 minutes before the vaccination. Pain responses measured on the University of Wisconsin Children's Hospital Pain Scale were significantly lower in the oral sucrose group, 2, 5, 7, and 9 minutes after administration of solution; the mean difference being 78.5% at 9 minutes.

COMMENTS Oral sucrose is an effective, easy-to-administer, short-acting analgesic for use during routine immunizations. As sucrose did not eliminate pain at any point of time as per this study, other pain reduction or comforting measures (paracetamol, distraction, holding, feeding, etc.) used in conjunction with sucrose administration could provide additional comfort for infants.

Oral montelukast is not useful for exacerbations of acute asthma in children (*Pediatric Emergency Care 2008; 24: 21-27*)

This randomized, double-blind, placebo-controlled trial investigated whether addition of oral montelukast (5 mg) to standard therapy (nebulized albuterol, ipratropium bromide and oral corticosteroids) for acute asthma exacerbations results in further improvement in breathing function over three hours in children aged 6 to 14 years. Both groups had similar mean FEV1 increase at 3 hours (mean [SD]: montelukast=16.8% [11.4%], placebo=19.9% [12.1%]; 95% confidence interval: -12.22% to 5.95%; P>0.05).

COMMENTS Oral montelukast (5 mg) added to standard therapy is unlikely to result in additional FEV1 improvements in 3 hours for children aged 6 to 14 years with moderate acute asthma exacerbations. Use of oral montelukast is thus still limited to chronic asthma.

Needle length and injection site are important to reduce the risk of local reactions to the second booster dose of DTaP (*Pediatrics 2008; 121: e646-652*)

Researchers at University of Washington assessed the relationship between needle length (16 or 25 mm) and injection site (arm or thigh) on the risk of local reactions to the second booster dose of DTaP vaccine in 1315 children. Among children vaccinated in the arm (89% of total), use of the shorter 16-mm needle was associated with a significantly higher risk of redness and pain compared with vaccination with a 25-mm needle. Similar trend was noticed for the smaller group of children vaccinated in the thigh, but the results were not statistically significant. In children vaccinated with a 25-mm needle, vaccination in the thigh vs. arm was associated with a substantially lower risk of redness, swelling and itching but not with any difference in the risk of pain, irritability, or change in activity.

COMMENTS Findings of this study suggest that a 25-mm needle should be used for the second booster dose of DTaP regardless of the injection site and that vaccination in the thigh may be a better option to decrease the risk of local reactions. There is no reason why these findings should not be applicable for DTwP which is still being by and large used for routine vaccination in India.

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