Letters to the Editor

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Do Pacifiers Reduce the Risk of Sudden Infant Death Syndrome?

Original Article: Sudden Infant Death Syndrome

Issue Date: May 15, 2009

Available at: http://www.aafp.org/afp/2009/0515/p870.html

Original Article: Risks and Benefits of Pacifiers

Issue Date: April 15, 2009

Available at: http://www.aafp.org/afp/2009/0415/p681.html

TO THE EDITOR: We believe that two articles (May 15, 2009 article on sudden infant death syndrome, and the April 15, 2009 article on pacifiers) erroneously conclude that pacifier use will decrease the risk of sudden infant death syndrome (SIDS). The original studies that linked pacifier use to a decrease in SIDS were all based on observational data, meaning they prove only an association, not cause and effect. Might it be that SIDS is a condition in which babies are in such a deep state of sleep that their breathing stimulus shuts down? Likewise, is it possible that babies who do not sleep as well or deeply are more often given a pacifier to soothe them (and their parents) and help them sleep?

Pacifiers have their place in soothing irritated babies, but their use should not be encouraged, as they cause real problems with breastfeeding and lactogenesis. We should not give parents a false sense of security that pacifiers reduce SIDS. Our efforts should go into proven risk reducers such as sleeping positions, parental smoking reduction, and breastfeeding.

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Author disclosure: Nothing to disclose.

IN REPLY: We appreciate Dr. and Ms. Abdun-Nur's interest in our article on SIDS. They are correct that there is a lack of randomized controlled trials (RCTs) of pacifier use in SIDS prevention. The association between pacifier use and reduced incidence of SIDS has been shown in multiple case-control studies.[1] Another study in a population where very few infants sleep in the prone position showed a significant link between pacifier use and reduced SIDS risk.[2] Many of the other recommendations for prevention of SIDS, including avoidance of prone sleeping, have not been tested in RCTs. The mechanism by which pacifiers may provide protection is unclear, but does not appear related to changes in sleep architecture.[3]

Whether or not to use pacifiers in breastfed infants has been a volatile subject for many years. A large RCT of pacifier use in breastfed infants showed that offering a pacifier at 15 days of age does not reduce the prevalence or duration of breastfeeding.[4] The option of offering a pacifier for the purpose of SIDS prevention once breastfeeding has been well established, as suggested in 2005 by the American Academy of Pediatrics (AAP),[5] is supported by the literature.

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4. Jenik AG, et al.; Pacifier and Breastfeeding Trial Group. Does the recommendation to use a pacifier influence the prevalence of breastfeeding? *J Pediatr.* 2009;155(3):350-354.
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IN REPLY: We thank the authors of this letter for highlighting the importance of sleep position and reduction in smoke exposure for prevention of SIDS. The intent of our article on the risks and benefits of pacifiers was not to suggest that the pacifier is a better method of SIDS prevention. Rather, our intent was to report that a thorough literature review of the risks and benefits of the pacifier, which included the guidelines from the AAP and the Canadian Paediatric Society, revealed an association between pacifier use and SIDS reduction.[1,2] Although the data are based mainly on case-control studies,[3] there are no RCTs to suggest that breastfeeding is linked with SIDS reduction either. On the contrary, the AAP guideline states that breastfeeding should be promoted for many reasons, yet there is insufficient evidence for recommending it as a SIDS reduction strategy.

In regard to concerns about the effect of pacifier use on breastfeeding, a recent systematic review[4] reported no adverse relationship based on the higher quality studies, confirming results of an earlier study suggesting the pacifier is more likely a marker for breastfeeding difficulties.[5] Furthermore, a recent RCT showed that recommending the pacifier at 15 days of age for SIDS prevention did not affect overall prevalence of exclusive breastfeeding at three months of age.[6]

Guidelines recommend the pacifier as an option for SIDS prevention to be used with other proven methods, and recent studies show there is likely no direct negative effect of the pacifier on breastfeeding. Therefore, we should not discourage pacifier use, but instead discuss all of the benefits and risks with our patients.

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Are Hypotonic Maintenance Fluids Safe in Hospitalized Children?

Original Article: Diagnosis and Management of Dehydration in Children

Issue Date: October 1, 2009

Available at: http://www.aafp.org/afp/2009/1001/p692.html

TO THE EDITOR: I was surprised to see the unqualified recommendation to use 25 percent normal saline for intravenous maintenance fluids in hospitalized infants and children. Research has called into question the safety of hypotonic maintenance fluids in hospitalized children.[1-3] Death and neurologic damage have been associated with hospital-acquired hyponatremia in children receiving hypotonic maintenance solutions, and a meta-analysis finds a significantly higher rate of the development of acute hyponatremia (odds ratio, 17.22; 95% confidence interval, 8.67 to 34.2).[1] The authors of this meta-analysis question the safety of hypotonic maintenance fluids in children because of the risk of iatrogenic hyponatremia and hyponatremic encephalopathy. The literature has not established that isotonic maintenance fluids are safer than hypotonic maintenance solution, but it is important to acknowledge research that questions the longstanding practice of using hypotonic maintenance fluids in children.

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Author disclosure: Nothing to disclose.

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EDITOR'S NOTE: This letter was sent to the authors of "Diagnosis and Management of Dehydration in Children," who declined to reply. ■