Prone Sleeping Is a Risk for SIDS, Not for Suffocation

The Policy Statement “SIDS and Other Sleep-Related Infant Deaths: Expansion of Recommendations for a Safe Infant Sleeping Environment” (http://pediatrics.aappublications.org/content/early/2011/10/12/peds.2011-2284) needs a comment.

Although the Safe Infant Sleeping Environment campaign is a worthwhile endeavor for the Academy and its partners, the recommendations should have been listed as 2 separate columns: 1 for sudden infant death syndrome (SIDS) and 1 for accidental trauma to the infant. It is a stretch of the facts to say, in both the abstract and the introduction, that “many of the modifiable risks and nonmodifiable risks for SIDS and suffocation are strikingly similar.”

In fact, the only risk factor for both SIDS and suffocation is one in which the sleeping infant is exposed to a foreign entity that is able either to block the infant’s airway (suffocation) or cause an extra source of heat for the baby (SIDS). Bed-sharing or heavy pillows or blankets are 2 examples of this. A too-soft bed for a much younger infant can also be added to this risk factor.

Prone sleep is a risk factor for SIDS. Saying that sleeping prone is, by itself, a risk for suffocation contradicts history. Before the 1990s when “back to sleep” was instituted, essentially all infants in this country slept prone. During that time, the SIDS death rate was 3.5 per 1000 live births. In other words, 996.5 babies per thousand births did not die despite the fact that almost all of them slept face down.

The Policy Statement, unfortunately, supports the belief of many coroner pathologists that SIDS is not a real disease or that it is actually suffocation. (It is true that a psychotic parent could suffocate a child with a pillow held fastidiously over the airway, but, as we all know, abusers are not gentle.)

SIDS is a real disease. The “Triple Risk Model” for SIDS is described in the Technical Report that accompanies the Policy Statement (online edition only). Thanks to the work of Hannah Kinney of Boston Children’s Hospital, we know that SIDS infants have lesions in the respiratory center of the brainstem. This is the first risk (preexisting respiratory center lesion). The second risk is the vulnerable developmental age, peaking at 2 to 4 months, in which central nervous system respiratory control changes. The third risk is an “environmental trigger”—that is, an environmental event that blocks continued respiratory activity.

This trigger appears to many of us to be deep sleep brought on by increased comfort from increased warmth. Prone sleep has been proven to increase warmth. The pacifier effect is most likely caused by an increase in activity, thus a lighter sleep.

In Reply

The American Academy of Pediatrics Task Force on SIDS decided to expand the safe sleep recommendations to include recommendations to reduce the risk of other sleep-related infant deaths (such as suffocation, entrapment, asphyxia) because, as indicated in the table below, many of the risk factors are the same.

In addition, the incidence of both SIDS and other sleep-related deaths is increased in African American and American Indian/Alaska Native populations.

As noted in the table, it is unknown whether the nonsupine position by itself increases the risk of suffocation, and we have therefore not included suffocation as a rationale for supine sleeping in either the Policy Statement or the Technical Report. Moreover, the similarity noted in risk factors should not be construed as implying that SIDS is caused by suffocation. Indeed, they are 2 separate entities. Unfortunately, at this time there is no unique cellular pathology that enables medical examiners, coroners, or pathologists to differentiate SIDS from suffocation, and thus a determination of the cause of death must be made in the absence of this information.1 It may be helpful to note that several groups have developed protocols for standardizing the assignment of cause of death in sudden and unexpected infant deaths,2–4 but these protocols have not yet been universally adopted.

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<table>
<thead>
<tr>
<th>Modifiable Risk Factor</th>
<th>Increases Risk of SIDS</th>
<th>Increases Risk of Suffocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prone/side position</td>
<td>Yes</td>
<td>Unknown</td>
</tr>
<tr>
<td>Soft bedding</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Adult bed/coach/armchair</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Overbundling</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Loose bedding</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Head covering</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Bed-sharing</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Tobacco exposure</td>
<td>Yes</td>
<td>Unknown</td>
</tr>
</tbody>
</table>
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Norman Lewak

*Pediatrics* 2012;130;e1389
DOI: 10.1542/peds.2012-2741A

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