

## GRADE tables for review question: Is there an association between sleep position on going to sleep and still birth or having a small for gestational age baby? – evidence from IPD meta-analysis

**Table 7: GRADE table for independent association between going-to-sleep position and stillbirth in comparison to left lateral going-to-sleep position – evidence from IPD meta-analysis**

<b>Phase of investigation</b>	<p>No restrictions were placed on phase of investigation. Given the relatively low frequency of stillbirth, a phase 3 prospective cohort study that aims to examine the role of sleep position and its effect on still birth is not feasible. Therefore no restrictions were placed on the phase of investigation.</p> <p>One IPD meta-analysis, including data from 5 case control studies<sup>a</sup>, was included and the quality of evidence was thus initially rated as high.</p>
<b>Results</b>	<p>Adjusted odds ratio (95% CI), vs left sleeping position for stillbirth:</p> <p><b>Supine:</b> 2.63 (1.72, 4.04)  <b>Right side:</b> 1.04 (0.83, 1.31)  <b>Prone:</b> 0.63 (0.12, 3.25)  <b>Variable sides:</b> 0.97 (0.70, 1.35)  <b>Propped up:</b> 1.30 (0.68, 2.49)  <b>Don't remember:</b> 2.26 (1.48, 3.46)</p>
<b>Study limitations</b>	The IPD meta-analysis was rated at low risk of bias.
<b>Inconsistency</b>	There was no formal assessment of inconsistency within the IPD meta-analysis however the results of the IPD meta-analysis were broadly consistent with the findings of the primary studies reported in the tables below. Therefore the evidence was not downgraded for inconsistency.
<b>Indirectness</b>	No serious indirectness in the majority of the evidence contributing to the IPD meta-analysis.
<b>Imprecision</b>	<p><b>Supine:</b> no serious imprecision</p> <p><b>Right side:</b> serious imprecision (confidence intervals crossed the line of no effect)</p> <p><b>Prone:</b> very serious imprecision (confidence intervals crossed the line of no effect and subjectively were considered very wide)</p>

	<p><b>Variable sides:</b> very serious imprecision (confidence intervals crossed the line of no effect and subjectively were considered very wide)</p> <p><b>Propped up:</b> very serious imprecision (confidence intervals crossed the line of no effect and subjectively were considered very wide)</p> <p><b>Don't remember:</b> no serious imprecision</p>
<b>Publication bias</b>	The evidence was downgraded for publication bias as it came from a relatively small number of primary studies, some of which were in an early phase of investigation.
<b>Moderate/large effect size</b>	The evidence was upgraded if moderate (aOR > 2.5 or aOR < 0.25) or large effect (aOR > 4.25 or aOR < 0.4) sizes were estimated. This applied to the supine position outcome.
<b>Overall quality</b>	<ul style="list-style-type: none"> <li>• Supine: HIGH</li> <li>• Right side: LOW</li> <li>• Prone: VERY LOW</li> <li>• Variable sides: VERY LOW</li> <li>• Propped up: VERY LOW</li> <li>• Don't remember: MODERATE</li> </ul>

Notes: <sup>a</sup>Cronin 2019. Abbreviations: aOR, adjusted odds ratio; CI, confidence interval.

**Table 8: GRADE table for independent association between going-to-sleep position and SGA in comparison to left lateral going-to-sleep position on last night – evidence from IPD meta-analysis**

<b>Phase of investigation</b>	<p>No restrictions were placed on phase of investigation. Given the relatively low frequency of stillbirth, a phase 3 prospective cohort study that aims to examine the role of sleep position and its effect on still birth is not feasible. Therefore no restrictions were placed on the phase of investigation.</p> <p>One IPD meta-analysis, including data from 4 case control studies<sup>a</sup>, was included and the quality of evidence was thus initially rated as high.</p>
<b>Results</b>	<p>Adjusted odds ratio (95% CI), vs left sleeping position for SGA as defined INTERGROWTH-21st 10th centile:</p> <p><b>Supine:</b> 3.23 (1.37, 7.59)</p> <p><b>Right side:</b> 1.05 (0.58, 1.90)</p> <p><b>Other:</b> 1.14 (0.62, 2.09)</p>

	Results also available for customised growth charts where supine is no longer statistically significantly associated with <10th centile (adjusted odds ratio 1.55 (0.72 to 3.35)).
<b>Study limitations</b>	The IPD meta-analysis was rated at low risk of bias.
<b>Inconsistency</b>	There was no formal assessment of inconsistency within the IPD meta-analysis however the results of the IPD meta-analysis were broadly consistent with the findings of the primary studies reported in the tables below (assuming factors leading to stillbirth and SGA are likely to be similar). Therefore the evidence was not downgraded for inconsistency.
<b>Indirectness</b>	No serious indirectness in the majority of the evidence contributing to the IPD meta-analysis.
<b>Imprecision</b>	<b>Supine:</b> no serious imprecision <b>Right side:</b> very serious imprecision (confidence intervals crossed 0.8 and 1.25) <b>Other:</b> very serious imprecision (confidence intervals crossed 0.8 and 1.25)
<b>Publication bias</b>	The evidence was downgraded for publication bias as it came from a relatively small number of primary studies, some of which were in an early phase of investigation.
<b>Moderate/large effect size</b>	The evidence was upgraded if moderate (aOR > 2.5 or aOR <0.25) or large effect (aOR > 4.25 or aOR < 0.4) sizes were estimated. This applied to the supine position outcome.
<b>Overall quality</b>	<ul style="list-style-type: none"> <li>• Supine: HIGH</li> <li>• Right side: VERY LOW</li> <li>• Other: VERY LOW</li> </ul>

Notes: <sup>a</sup>Anderson 2019. Abbreviations: aOR, adjusted odds ratio; CI, confidence interval.