

Interactions between sleeping position and feeding on cardiorespiratory activity in preterm infants.

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Infants sleeping in the prone position are at greater risk for sudden infant death syndrome (SIDS). Sleep position-dependent changes in cardiorespiratory activity may contribute to this increased risk. Cardiorespiratory activity is also affected by feeding. Twenty prematurely-born infants were studied at 31-36 weeks postconceptional age while sleeping in the prone and supine positions. Heart rate, respiratory rate, and patterns of variability were recorded during interfeed intervals, and effects of position and time after feeding were analyzed by repeated measures analyses of variance. There were significant effects of both sleeping position and time after feeding. Heart rate is higher and heart period variability is lower in the prone position, and the effects of sleeping position on cardiac functioning are more pronounced during the middle of the intrafeed interval. In preterm infants, autonomic responses to nutrient processing modulate the cardiorespiratory effects of sleeping position. Prone sleeping risk may vary with time after feeding.

For Full-text: <http://www3.interscience.wiley.com/cgi-bin/abstract/112137017/ABSTRACT>