EFFECT OF BODY POSITIONING DURING NASAL CPAP

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Background: The effects of body positioning (BP) of preterm infants (PT) receiving nasal CPAP was not well evaluated in the literature.

Objective: To evaluate the possible effect of four BP (prone, supine, left and right lateral) on respiratory parameters of PT using nasal CPAP.

Methods: Sixteen infants with < 37 weeks and < 2500g receiving nasal CPAP were studied. Each PT was submitted to the four BP; supine (A), right lateral (B), prone (C) and left lateral (D), in one of the four randomized sequences. 1- A, D, C, B; 2- C, A, B, D; 3- B, C, D, A e 4- D, B, A, C. Data were collected every 10 minutes during the 60 minutes that the infant remained at the position.

Results: Infants had GA of 29.7 ± 2 weeks, BW of 1353 ± 280 g, 37.5% receive antenatal corticosteroids, 9 (56.3) were male. Infants received 5 minutes Apgar of 8.7 (6 to 10), and were 2.7 (1 to 7) days old. They were in very stable clinical condition. With mean Silverman & Anderson bulletin (SAB) of 0.25 (0 to 1), receiving $\leq 30\%$ of oxygen and PEEP ranging from 4 to 6. No statistical or clinical relevant difference regarding respiratory and cardiac frequency, respiratory pause, SAB or oxygen saturation was found. Nasal prong was more frequently out of nostrils at prone position (56,25%) than other BP ($p < 0.01$).

Conclusion: Respiratory parameters of clinically stable preterm infants receiving nasal CPAP are not affected by BP. At prone position nasal prong was found more frequently out of nostrils.