## **Anesthésie pédiatrique - Divers**

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# Comparison of lateral and supine positions for tracheal extubation among infants.Preliminary results of a randomized clinical trial.

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## Position du problème et objectif(s) de l'étude:

In Pediatric patients: The lateral position is known to be advantageous for maintaining airway patency (avoid obtruction). The hypothesis was that tracheal extubation in the lateral position would improve airway obstruction that often occurs after extubation in infants. the objective of our study, was to investigate the impact of supine versus lateral positioning for tracheal extubation among infants and young children on the incidence of perioperative respiratory adverse events (PRAEs).

#### Matériel et méthodes:

After Ethics committee approval and parents 'consent', a prospective randomized trial was conducted in the department of pediatric anesthesia in the Hedi Chaker university hospital during the last 6 months from janvier 2022 to juin 2022 . we had included patients: age 2 months to 2 years infants requiring general anesthesia with tracheal intubation for major surgeries with a duration  $\geq$  60 min with sevoflurane induction and maintenance

The patients were randomly divided into two groups:

group L:extubation in the right lateral position group

S:extubation in the supine position

Oxygen saturation (SpO2) and the incidence of stridor, laryngospasm, and coughing after tracheal extubation were assessed.

#### Résultats & Discussion:

Demographic parameters were comparable between the two groups of the study. The mean  $\pm$  standard deviation of the lowest SpO2 values within 5 min after extubation was significantly higher in group L (98.3  $\pm$  2.1%) than in group S (95.8  $\pm$  2.2%) with (OR=1.26; 95% CI: 0.9–2.5, p = 0.003). The incidences of a perioperative respiratory adverse events such as stridor and laryngospasm of group L were significantly lower than those of group S (1/27, 3.7% vs. 5/27, 18.5%, respectively with OR= 1.9; 95% CI

:1.4-2.7, p=0.05). The incidence of desaturation and coughing were not significantly different between groups.

#### **Conclusion:**

The extubation in lateral position among infants was safe and seems to be advantageous for maintaining airway patency and avoiding obstruction after tracheal extubation. It allowed less PAREs with better oxygen saturation and it reduced the need for oxygen and ventilatory support.

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