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50 Years Ago in *THE JOURNAL OF PEDIATRICS*

Vigorous and Repeated Nasopharyngeal Suctioning

Cordero L, Hon EH. Neonatal bradycardia following nasopharyngeal stimulation. *J Pediatr* 1971;78:441-7.

Fifty years ago in *The Journal of Pediatrics*, Cordero and Hon described responses in 41 infants who were suctioned in the oro-/nasopharynx with a bulb syringe and 46 infants suctioned with a 5- or 8-Fr feeding tube and a de Lee trap. Suctioning with a bulb syringe did not cause bradycardia, whereas prolonged suctioning with a feeding tube caused bradycardia in 7 (15%), and apnea in 5 (11%) infants. Two required intubation, one of whom experienced cardiac arrest and received chest compressions.

Cordero and Hon were cited in the American Heart Association/International Liaison Committee on Resuscitation 2000 guidelines¹; however, not until 2010, routine oro/pharyngeal suctioning was discouraged due to concerns that the harm might outweigh the theoretical benefits of facilitating lung fluid clearance.² A 2017 Cochrane review including 8 (quasi-) randomized trials showed no difference in intubation, oxygen, chest compression, or adrenaline administration between routine oro-/nasopharyngeal suctioning vs no suction.³ Cordero and Hon's study was excluded, as it was nonrandomized. No study reported the outcomes arrhythmia or apnea, but oxygen saturation was different, favoring no suction initially. However, after 15-20 minutes, oxygen saturation became greater in the suctioned infants.

The risk of bias of nonrandomized observations might be an explanation why serious adverse events could not be confirmed by the Cochrane review. Cordero and Hon reported intrapartum oral and nasal suctioning followed by 10-20 seconds of blind suctioning after birth. Such repeated and vigorous suctioning belongs to the past and should be avoided.

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