Nothing to sneeze at: Neonatal Intranasal Fentanyl Use
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Background: The recent addition of intranasal medication options for procedural sedation and analgesia has decreased the need for additional painful procedures such as intravenous lines for medication administration. Intranasal fentanyl has been used prehospital and in the emergency department for several years, and is increasingly utilized in other locations such as the neonatal intensive care unit. A paucity of data exists in these smallest children, so we sought to explore trends in intranasal fentanyl use in our neonatal intensive care unit.

Objective: To understand intranasal fentanyl (INF) in the neonatal intensive care unit (NICU) from December 2014 to December 2017.

Design/Methods: A retrospective cohort study was conducted of patients receiving intranasal fentanyl in the NICU of a large free-standing quaternary inner-city children’s hospital from December 2014 to 2017. Demographic data was abstracted from the medical record including gestational age on administration, post-menstrual age, day of life on administration, sex, and medication initial and total dose. This study was approved by our local Institutional Review Board.

Results: A total of 75 patients received 96 INF administrations: 36 male (48%), mean day of life on administration 57.70 +/- 55.93, 28.67 +/- 5.63 mean weeks gestation, post-menstrual age at administration 36.92 +/- 9.49 mean weeks. Initial doses of medications were 1 mcg/kg/dose INF (range 0.5-2 mcg/kg).

Conclusion(s): Intranasal adjuncts are increasingly used in the NICU. Starting dose of INF is 1 mcg/kg/dose and typically one dose is given.