

Nasal Cycling Revisited

As Marshall et al¹ point out in their article published in this issue of *RESPIRATORY CARE*, nasal cycling appeared in the literature over 100 years ago, and it continues to be regularly reported in medical and scientific journals.²⁻⁷ Respiratory texts and journals have seldom included this concept. A search of *RESPIRATORY CARE* using the terms “nasal cycling” and “nasal cycle” found only the e-publication ahead of print of this article by Marshall et al,¹ whereas a CINAHL search revealed a 2014 abstract by the same authors presented at the American Association for Respiratory Care Congress and published in *RESPIRATORY CARE*.⁸

Marshall et al¹ and Eccles⁹ describe nasal cycling as “spontaneous and often reciprocal changes in unilateral air flow associated with congestion and decongestion of the nasal venous sinuses.” Using a bench model, Marshall et al¹ demonstrated that a statistically significant change does occur in delivered F_{IO_2} , with variances of up to 0.1, with simulated nasal cycling. They then questioned whether these changes in nasal air flow may have a clinically important impact on oxygenation for patients receiving oxygen via nasal cannula.

Bench studies do not predictably translate into clinical practice, but this study raises interesting questions requiring further research. Does nasal cycling effect oxygenation in hypoxemic patients? Is the impact seen only in patients receiving oxygen via nasal cannula? What is the impact on patients receiving oxygen via mask breathing with mouth

open? Is there a significant impact seen in patients who are receiving oxygen via mask breathing with mouth closed?

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Maybe, as with any good article, this one leaves more questions to be answered than it answers.

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