Reviewer's report

Title: Validation of a portable nitric oxide analyser for screening in primary ciliary dyskinesia

Version: 1 Date: 4 March 2013

Reviewer: Mauro Maniscalco

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GENERAL COMMENTS

In their study Hassis and coworkers have compared the reliability and usability of a hand-held analyser with a static nasal NO analyser in patients affected by primary ciliary dyskinesia and other respiratory diseases using different methods and different flow rates. They found that the hand-held device present a good sensitivity and specificity as a screening test for PCD, equating to the static analyser although they used a technique different by the manufacturer’s guidelines, because of the difficulties of patients to keep the breath-hold requirement.

The study is well done and the question posed is well defined.

The main problem is the novelty of data. There is another study comparing nasal nitric oxide by hand–held and stationary devices in PCD and other respiratory diseases, showing that the hand-held device is as effective as the stationary analyzer for assessing nasal NO in PCD (Eur J Clin Invest. 2011 Oct;41(10):1063-70). This study must be quoted and discussed.

Furthermore, a very recent study has showed that tidal breathing nNO using an hand-held NO devices discriminates significantly between PCD, CF and HS (PLoS One. 2013;8(2):e57262). This study must be quoted and discussed.

Introduction

Several studies have compared nasal NO using hand–held and stationary devices. These should be quoted (Rhinology. 2008 Mar;46(1):23-7. Eur J Clin Invest. 2008 Mar;38(3):197-200

Methods

As the Authors decided not to use breath hold, have the patients breathed against a resistance to close the velum, as suggested by ATS guidelines?

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests:

I declare that I have no competing interests