Nasal nitric oxide measurement in children for the diagnosis of primary ciliary dyskinesia: European Respiratory Society technical standard

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Abstract
Nasal nitric oxide (nNO) is extremely low in most people with primary ciliary dyskinesia (PCD) and its measurement is an important contributor to making the diagnosis. Existing guidelines and technical standards focus on nNO measurements in older, cooperative children using chemiluminescence analysers. However, measurements of nNO in pre-school-age children (age 2–5 years) may facilitate early diagnosis and electrochemical rather than chemiluminescence analysers are widely used. Pre-schoolers often need different methods to be employed when measuring nNO. Hence, a European Respiratory Society Task Force has developed this technical standard as the first step towards standardising sampling, analysis and reporting of nNO measured as part of the diagnostic testing for PCD in all age groups, including pre-school-age children. Furthermore, we considered both chemiluminescence and electrochemical analysers that are in use worldwide. There was a paucity of quality evidence for electrochemical analysers and

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sampling methods used in young children, and the Task Force proposes future research priorities to allow updates of this technical standard.