

pH-multichannel intraluminal impedance monitoring can ID GERD

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For preschool-aged children, pH-multichannel intraluminal impedance (MII) monitoring is useful for diagnosing gastroesophageal reflux disease (GERD)-related wheezing, according to a study published online

Nov. 29 in *Diagnostics*.

Ivan Pavic, M.D., from Children's Hospital Zagreb in Croatia, and colleagues examined the diagnostic value of pH-MII monitoring in [preschool children](#) (aged younger than 6 years) with recurrent wheezing and evaluated GERD-related therapy effects. In those clinically suspected of GERD involvement, pH-MII monitoring was conducted; in severe cases, flexible bronchoscopy with [bronchoalveolar lavage](#) (BAL) was performed.

Seventy-one percent of the 66 children had proven GERD on pH-MII. The researchers found that the GERD group had higher total, liquid, mixed, and gas reflux episodes than the non-GERD group, as well as more acidic and weakly acidic episodes. Wheezing episodes were significantly reduced with GERD treatment.

The introduction of a proton pump inhibitor (PPI) was associated with a ≥ 50 percent reduction in wheezing. Compared with those without GERD, those with GERD more often showed a ≥ 50 percent reduction in wheezing. A ≥ 50 percent reduction in wheezing was predicted by PPI usage, higher total GER episodes, acidic episodes, and liquid and proximal episodes on MII. The GERD and non-GERD groups had no significant differences in BAL.

"While the relationship between GERD and airway inflammation warrants further exploration, this study significantly advances our understanding of GERD's role in preschool wheezing and offers valuable insights for [clinical practice](#)," the authors write.

More information: Ivan Pavić et al, Diagnostic Utility of pH-MII Monitoring in Preschool Children with Recurrent Wheeze and Suspected Gastroesophageal Reflux Disease: A Prospective Study, *Diagnostics* (2023). [DOI: 10.3390/diagnostics13233567](https://doi.org/10.3390/diagnostics13233567)

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