Infantile hypertrophic pyloric stenosis (IHPS) remains, in some ways, an enigmatic condition. In fact, as a medical community, we seem to simultaneously know both so much and yet so little about this disease. On 1 hand, we know how to diagnose this condition: through a careful history, physical examination, and abdominal ultrasound. We can also effectively manage this condition through intravenous fluid resuscitation and pyloromyotomy. In addition to being efficient; our treatment strategy is also extremely safe, with few reported complications. Yet, on the other hand, there are some mysteries regarding IHPS that we cannot put to rest. Namely, we still cannot predict which infants will develop this condition, and the effort to pinpoint a definitive cause remains equally elusive. In addition, although authors of multiple studies, including at least 2 randomized controlled trial, have attempted to determine the best method for feeding these infants postoperatively, this too remains a point of debate in many institutions.

For decades, the trajectory of the incidence of IHPS has remained 1 of these unsettled questions. Whereas multiple reports from several Western nations have documented a declining incidence, other reports have painted a more mixed picture. Recently, Kapoor et al determined the incidence of IHPS to be decreasing in a study in which the authors evaluated >29 000 cases among a group of 14.7 million live births. However, the findings of this study were based on data from only 11 states and, in addition, have not been confirmed by other recent reports.

The authors of the article “Pyloric Stenosis: National Trends in the Incidence Rate and Resource Use in the United States from 2012 to 2016” in this issue of Hospital Pediatrics are to be commended for their efforts to definitively answer this lingering question. In their study, they use the National Inpatient Sample (NIS) to analyze >32 000 cases distributed among 20.8 million live births, making it the largest population-based analysis of IHPS in the United States in recent medical literature. In addition, the NIS contained data from a minimum of 44 states throughout the entirety of the period analyzed, making the current study nationally representative and highly relevant to our entire community. This study documents the decrease in incidence of IHPS from 1.76 to 1.57 cases per 1000 live births in the United States from 2012 to 2016. The authors use these data to suggest that the incidence of IHPS is definitively declining across the country at the present time. Although they may in fact be correct, one must exercise caution when making this conclusion. The most profound difference in IHPS incidence occurred during the first 2 years of the study period, during which the incidence declined from 1.76 cases per 1000 live births in 2012 to 1.57 cases per 1000 live births in 2013. However, according to the current study, the incidence has essentially remained unchanged from 2013 to 2016. Herein lies the difficulty in attempting to make such definitive population-based conclusions with...
only 5 years of applicable data. In fact, among the other studies that have revealed a declining incidence of IHPS, none of the researchers used a study period shorter than 9 years.11,14–17 Although the authors may be correct in their assertion that the IHPS incidence is decreasing, only time can conclusively prove their argument. For instance, repeating the same study over a longer period of time would allow for comparison of 5-year intervals. Undoubtedly, comparing the median incidence of IHPS in 2012 to 2016 versus 2017 to 2021 would provide a better statistical evaluation of whether this disease is becoming more or less prevalent over time. Although that analysis cannot be performed for years, the authors could have, in fact, also chosen to compare the median incidence in 2012 to 2016 versus 2007 to 2011. Although the NIS did undergo significant design changes in 2012, these data could still potentially yield results that would have, in fact, bolstered the authors’ arguments.

REFERENCES

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Brian A. Coakley and Marina Reppucci  
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