

# This Month In **The JOURNAL** of **PEDIATRICS**

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## Overweight is associated with early puberty in boys and girls

— Stephen R. Daniels, MD, PhD

It has been clear that overweight and obesity in childhood is associated with onset of puberty at a younger age in girls. For boys, this has been less clear and study results have been variable. One issue is that defining onset of puberty may be more difficult in boys compared with girls. In this volume of *The Journal*, Chen et al used data from the Boston Birth Cohort Study to evaluate this question. They used age at peak height velocity as a marker of puberty. They found that overweight or obesity from age 2-7 years is associated with earlier onset of puberty in boys as well as in girls. However, those with overweight or obesity at age 2-4 years who became normal weight at age 5-7 had normal timing of puberty. This suggests that interventions to achieve normal weight from age 5-6 years could impact timing of puberty and avoid the deleterious impact of early onset of puberty.

[Article page 221](#) ►

## Cyber school is a marker of youth with high-risk diabetes

— David M. Maahs, MD, PhD

The COVID-19 pandemic has impacted child health negatively in the past year, including significant effects on child education and development. School systems have transitioned to remote learning strategies with varying success for individual students. Concerns exist that online school may exacerbate disparities for youth in families with less technical capabilities and parental support. In a timely report, March et al from the University of Pittsburgh explore the health characteristics of youth with diabetes in cyber school compared with peers with diabetes in traditional brick-and-mortar schools in 2017-2018, pre-COVID-19 pandemic. The researchers found that those youth with diabetes in cyber school might be a high-risk population. Public insurance was more common among youth attending cyber school who had higher HbA1c, less insulin pump use, and more mental health conditions compared with peers in traditional schools. The youth attending cyber school were also less likely to have recommended vision or dental evaluations. The authors conclude that understanding the potential impact of cyber school-related factors on health may encourage additional provider, system, and school supports for school age children with diabetes. With the continued COVID-19 pandemic and need for remote learning, increased attention to the interplay of child health and education will be a heightened priority.

[Article page 167](#) ►

## Primary ciliary dyskinesia: A neonatal disease?

— Raye-Ann deRegnier, MD

In this volume of *The Journal*, Horani and Ferkol update our current understanding of primary ciliary dyskinesia and other ciliopathies. Although neonatologists may be tempted to bypass this article, it is relevant to newborn patients because ciliary function and diseases are of increasing importance in fetal development (eg, determination of body laterality) and neonatal illnesses. The authors report that the majority of infants with primary ciliary dyskinesia present with early and prolonged neonatal respiratory distress or with laterality disorders. Although laterality disorders are readily apparent on radiographs, it is not yet clear how neonatologists should think about these diseases in tachypneic infants because primary ciliopathies are rare

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diseases and tachypnea is a very common problem in newborn infants. Most neonatologists can recall unusual patients with prolonged tachypnea of undetermined etiology. These patients may be good candidates for further research so we can begin to identify distinguishing neonatal clinical characteristics that would allow for targeted follow up and early diagnosis of affected infants.

[Article page 15](#) ►

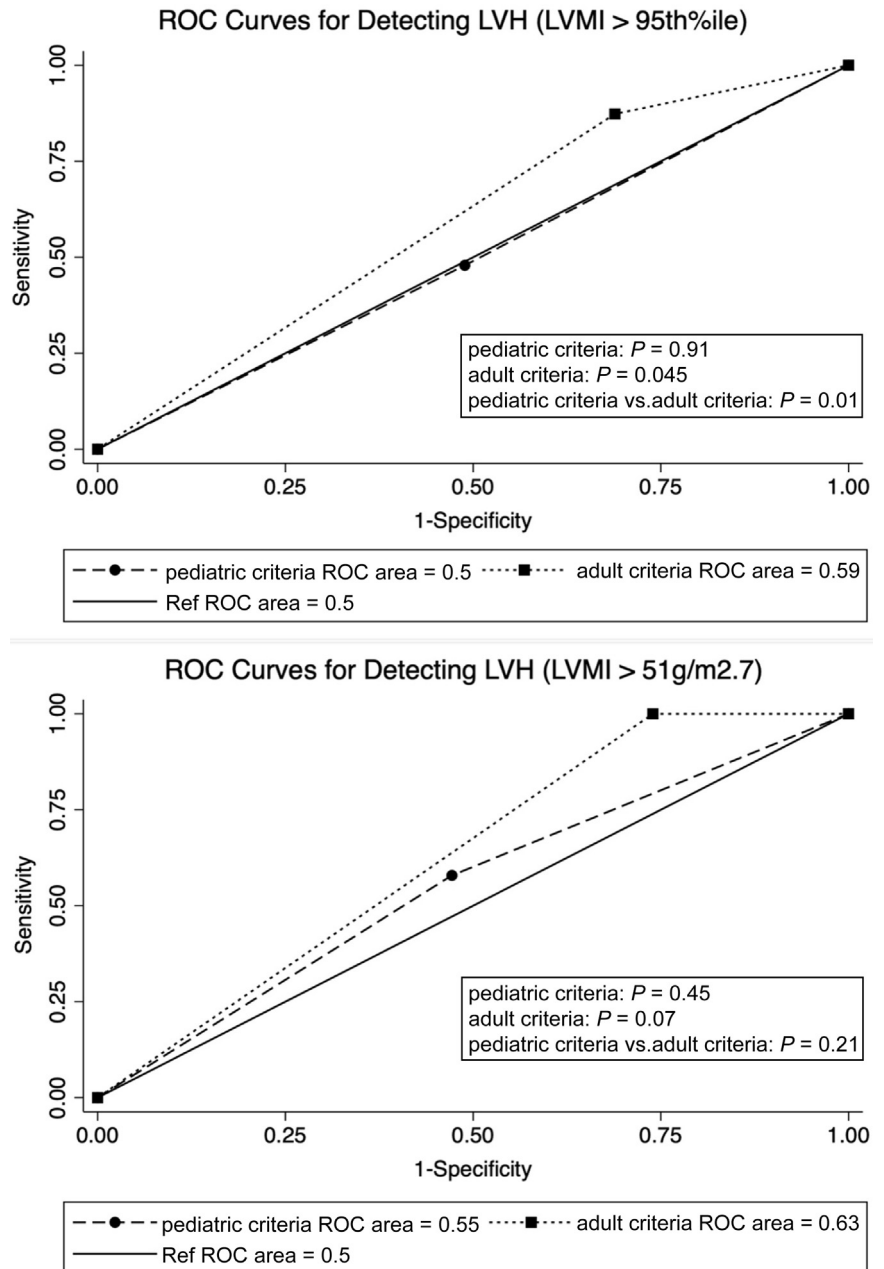
## Interpretation of ambulatory blood pressure monitoring results

— Stephen R. Daniels, MD, PhD

**H**ypertension is an important risk factor for development of cardiovascular disease. However, it can be difficult to diagnose hypertension because blood pressure changes frequently over time and may be elevated in response to being in a clinical care setting. Twenty-four-hour ambulatory blood pressure monitoring (ABPM) is one method for evaluating blood pressure over the course of the day and night. One difficulty with ABPM is knowing the best approach to interpretation of the blood pressure data.

In this volume of *The Journal*, Merchant et al report a comparison of the use of current pediatric and adult approaches to evaluation of ABPM data to determine which approach is better at identifying individuals who have developed left ventricular hypertrophy (LVH), the major target organ effect of hypertension in adolescents (**Figure**). Interestingly, they found that the adult guidelines classified more individuals as having hypertension and were a better predictor of LVH. These results raise the question of whether the current approach to evaluation of ABPM results in adolescents should be reconsidered.

[Article page 161](#) ►



**Figure.** ROC analyses for detecting LVH >95th percentile were significant for adult criteria (0.59,  $P = .045$ ) but not for pediatric criteria (0.50,  $P = .91$ ). ROC analyses for detecting LVH >51 g/m2.7 were not significant for adult criteria (0.63,  $P = .07$ ) or pediatric criteria (0.55,  $P = .45$ ).