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Reply

To the Editor:

Osamu et al identified a distinct increase in body mass index (BMI) after puberty that is probably not related to early adiposity rebound. We consider this to be a valuable point.

We identified 3 BMI trajectories in early life and the high-increasing groups had the greatest risks of cardiovascular disease risks in middle age.[1] It has been reported that early BMI rebound, which is related to being overweight at 6 years of age, is associated with adult obesity.[2] We used the cut-off points of BMI_{24} and BMI_{28} at 18 years of age, and found few children with overweight at 6 years of age in our study.[3,4] We indicated that these data do not fully reflect the relationship between BMI trajectory from birth to middle age and cardiometabolic risks.

Additionally, participants in the high-increasing group experienced moderate initial BMI levels from 12 years of age and exceeded BMI levels in the moderate-increasing group at 18 years of age. Puberty involves a series of physiologic and metabolic changes as well as changing fat distribution.[4] Osamu et al pointed out there is a distinct subgroup in which BMI increases rapidly after onset of puberty, exacerbating the cardiovascular disease risk owing to increasing adiposity. We found that, in the high-increasing group, the relative risk of hypertension is more than 2 times higher for those in puberty compared with those in prepuberty, but participants in prepuberty had higher relative risks of diabetes, high-risk high-density lipoprotein cholesterol levels, and triglycerides than those in puberty (see Table V in the article). Puberty is another important period to focus on obesity prevention, but its relationship with cardiovascular risk needs further analysis in large-scale studies.

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https://doi.org/10.1016/j.jpeds.2020.06.050

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Age differentiation in children with asthma treated with intravenous magnesium sulphate

To the Editor:

With great interest we read the article by Johnson et al regarding intravenous magnesium sulphate (IVMg) in children between 2 and 17 years of age with acute asthma.[1] The authors reported that clinicians used IVMg in 10.5% of 60 000 children visiting with asthma. Other findings include highly variable use between centers, mostly in moderate and severe asthma cases, late administration of IVMg in the emergency department, and low return rates of treated children within 72 hours after discharge.

The authors did not report separately their findings for young children between 2 and 5 years of age with acute episodic viral wheezing and children of 6 years and older with acute asthma. Evidence of effect of IVMg in acute episodic viral wheezing, similar to oral corticosteroids and bronchodilators, is limited.[2-6] For example, Pruikkonen