



Exploring comprehensive insights into pediatric obesity

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Obesity is currently one of the most significant public health challenges worldwide. The prevalence of pediatric obesity has increased over the past several decades worldwide including South Korea. The increasing prevalence of childhood and adolescent obesity is associated with an increase in comorbidities previously identified in the adult population such as type 2 diabetes mellitus, hypertension, nonalcoholic fatty liver disease, and dyslipidemia [1]. The risk of metabolic syndrome and health hazards increases in even overweight children and adolescents [2]. Childhood and adolescent obesity also has psychosocial consequences and may contribute to delayed academic and social development, poor self-esteem, and depression [3]. Increased medical and indirect costs are another consequence of pediatric obesity. Therefore, this special issue aims to explore comprehensive insights into pediatric obesity from several perspectives: (1) the prevalence and prevention of pediatric obesity [4], (2) understanding the multiorgan comorbidities of pediatric obesity [5], and (3) pharmacological treatments for pediatric obesity [6].

In the current situation, where the prevalence of pediatric obesity is increasing, its prevention is very important and more cost-effective than long-term obesity management. Lee [4] reviewed the prevalence of pediatric obesity in Korea using various national and international data sources, and suggested various prevention strategies including community-level interventions for each age group through a literature review.

Why should we focus on pediatric obesity? Childhood and adolescent obesity does not naturally resolve as the child grows, but instead persists into adulthood, with various physical and psychological complications already occurring before adulthood. Lee [5] reviewed not only endocrine complications, such as diabetes mellitus and dyslipidemia, but also immune diseases, cancer, skeletal disorders, and gastrointestinal diseases. Additionally, the article summarized the effects of obesity on growth, puberty, and psychological aspects.

To ensure the timely and effective treatment of pediatric obesity, the 2023 guidelines from the American Academy of Pediatrics recommend immediate intervention [7]. These guidelines highlight a comprehensive approach, including intensive health behavior and lifestyle treatment (IHBLT) and pharmacotherapy, for children and adolescents who do not respond to lifestyle changes alone, especially those with severe obesity. Several anti-obesity medications are now available and are being applied to treat pediatric obesity. Chung [6] provided a detailed review of the mechanisms, dosages, and side effects of various medications used to treat childhood and adolescent obesity and elaborated on the precise timing of initiating and discontinuing pharmacotherapy. It is imperative to refrain from relying exclusively on pharmacological interventions without lifestyle modifications. A comprehensive understanding of the unique characteristics and potential adverse effects associated with each medication is essential in clinical practice.

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Effective management of pediatric obesity involves an integrated approach that combines prevention, treatment, and ongoing care to address both obesity and its related chronic diseases. In the low birth rate era, professionals from diverse disciplines must collaborate and show interest in addressing pediatric obesity and promoting health. I hope these articles will help clinicians better understand obesity in children and adolescents.

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