



## ABSTRAK

### Latar belakang

Obesitas merupakan masalah kesehatan kompleks yang mempengaruhi anak-anak pada setiap kelompok umur. Sindrom metabolik merupakan salah satu komorbiditas yang muncul sejalan dengan peningkatan prevalensi obesitas. Manajemen obesitas dan sindrom metabolik meliputi pengaturan pola makan, aktifitas fisik, perubahan pola hidup, terapi farmakologis dan dukungan psikososial.

### Kasus

Pemantauan jangka panjang dan intervensi multidisiplin dilakukan terhadap remaja perempuan berusia 10 tahun 8 bulan dengan obesitas yang menyebabkan sindrom metabolik. Penelitian ini mengamati luaran klinis berat badan, tekanan darah, glukosa darah puasa, kadar HbA1c, profil lipid, fungsi ginjal, *fatty liver*, fungsi penglihatan, siklus menstruasi dan kualitas hidup. Selama 12 bulan pengamatan, luaran yang tercapai yaitu terkontrolnya kadar gula darah puasa, tekanan darah, profil lipid dan tidak munculnya komplikasi. Luarannya yang belum tercapai adalah kualitas hidup dan masalah psikologis. Adapun faktor yang mempengaruhi luarannya yang belum tercapai adalah perceraian orangtua dan pandemi Covid-19.

### Kesimpulan

Obesitas remaja adalah kondisi kompleks yang melibatkan masalah medis, psikologi dan sosial budaya. Deteksi dini morbiditas diperlukan sebagai bagian dari manajemen komprehensif.

### Kata Kunci

Obesitas, sindrom metabolik, tekanan darah, gula darah puasa, lipid, *fatty liver*, kualitas hidup



## ABSTRACT

### **Background**

The issue of obesity is a multifactorial health challenge, which poses a significant impact on children across all developmental stages. As the prevalence of obesity rises, metabolic syndrome has emerged as one of the co-existing medical conditions. Effective management of both obesity and metabolic syndrome entails a comprehensive approach incorporating various interventions such as dietary management, physical activity, lifestyle adjustments, physiological therapies, and psychosocial support.

### **Case**

A comprehensive, long-term monitoring and multidisciplinary intervention were carried out on a 10-year and 8-month-old adolescent girl diagnosed with obesity, leading to metabolic syndrome. This study evaluated clinical outcomes encompassing body weight, blood pressure, fasting blood glucose, HbA1c levels, lipid profile, renal function, fatty liver, visual function, menstrual cycle, and quality of life. The study spanned over 12 months, and the outcomes achieved included controlled fasting blood glucose, blood pressure, lipid profile, and the absence of complications. However, quality of life and psychological problems remained unattained. Factors contributing to the unmet outcomes were identified as parental divorce and the disruptive impact of the Covid-19 pandemic.

### **Conclusion**

Adolescent obesity represents a multifaceted condition that encompasses not only medical aspects but also psychological and socio-cultural factors. As a part of a comprehensive management strategy, early identification of any potential morbidity is imperative.

### **Keyword**

Obesity, metabolic syndrome, blood pressure, fasting blood glucose, lipids, fatty liver, quality of life