Parental love and food: a two-edged sword?
Telemedicine to identify gender differences in the risk of developing hypertension in obese children.

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Rationale and purpose

Childhood overweight and obesity are serious public health challenges worldwide. The latest WHO data on childhood obesity estimate that in 2019 there were more than 38 million overweight/obese children under 5 years of age worldwide and more than 340 million children/adolescents between 5 and 19 years of age in these categories, of whom 124 million were obese.
Overweight children run a higher risk of developing conditions such as diabetes, heart disease, cancer, and hypertension: this is defined through percentile tables up to age 16 and with values > 130/85 mmHg for children over age 16, and its prevalence among overweight and obese children is 5% and 15.3%, respectively, according to ESC data.
The parent-child relationship is a key element in the pursuit of health pathways to rational, evidence-based weight loss: parental eating habits invariably reflect on children, and the environment in which children grow up dramatically affects the adults they will become, physically and psychologically. Excessive parental love can lead to a lack of objectivity that underlies the development of unhealthy eating habits, which are laterndifficult to eradicate; ; in fact, the latest ISS data tell us that about 40 percent of mothers of overweight or obese children believe that their child's weight is within the normal range. Added to this is the increasing misuse of technologies such as the use of tablets and video games, which by necessity replace sports and outdoor physical activity in the daily routine.
Starting with data from the SIIA (Italian Society of Hypertension) according to which males are more likely to develop hypertension over a lifetime, we intend to research possible gender differences in the inherent risk of developing this disease, using telemedicine tools for remote and family-based analysis of blood pressure trends over the day in a population of obese children.

Methods

Using 24-hour blood pressure monitoring with remote and real-time assessment in 4 obese boys and 4 obese girls followed at dedicated outpatient clinics and undergoing individualized dieto-motor therapy.

Expected Results

It is expected to detect higher systolic and diastolic blood pressure values in the male than in the female test population. In addition, the different responses between males and females to the proposed therapy, in terms of blood pressure values and rate of weight loss, will be analyzed.

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