Childhood Obesity/Overweight: Early Diagnosis to Prevent Premature Cardiovascular Disease

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Obesity/overweight appears to be the new epidemic of the modern era, threatening the world with increased diabetes and cardiovascular disease [1,2]. Even worse, this phenomenon is now present among children. Due to changes in eating habits and the low level of physical activity, childhood overweight and obesity has become a major health problem, associated with childhood hypertension, early-onset type 2 diabetes and dyslipidemia, and premature morbidity and mortality [3,4]. The most problematic form of childhood obesity is the form accompanied by “metabolic syndrome features,” such as increased waist circumference, elevated systolic blood pressure, dyslipidemia with high triglycerides, low high density lipoprotein and high low density lipoprotein [5].

Early diagnosis of overweight/obesity and metabolic syndrome features in children is crucial as it allows implementation of dietary counseling, encouragement of a healthy lifestyle and healthy behavior patterns, and even early drug treatment if needed [6]. Long-term follow-up of the impact of dietary counseling from infancy to 14 years of age has been shown to be effective in reducing lipid levels and body mass index, even many years after the initial counseling [7]. The recently published Princeton follow-up study has demonstrated that overweight/obesity together with high blood pressure and high triglycerides in children aged 6–19 years will increase by 15-fold the risk for early onset of cardiovascular disease during the subsequent 30 years [8]. These consequences of obesity in children could be prevented by implementation of counseling as early as possible, as demonstrated in the STRIP study [7]. We can conclude therefore that early detection of overweight/obesity in children as well as detection of metabolic syndrome features are of prime importance, especially if we want to prevent the later consequence of morbidity.

The situation today in children (and also in adults) concerning awareness, documentation and treatment is far from optimal, as demonstrated in the article by Meyerovitch and co-authors in this issue of IMAJ/9. Taking advantage of the current electronic medical recordings in primary medical care, the authors found that in only 10% of children visiting a clinic was weight recorded, and of those a quarter were found to be overweight and another 11% borderline overweight. Thus, one in three measured children is potentially overweight and in need of further assessment of metabolic features and counseling. However, in the remaining 90% of visiting children for whom measurements were not recorded, nothing is known. If we assume that they have a similar occurrence of overweight then only 1 of 10 overweight children has a record of body mass index. Obviously therefore, we may miss the opportunity for early intervention and prevention of a dismal future outcome related to overweight and obesity.

The article by Meyerovitch and team together with this editorial call for urgent action. Weight and “metabolic features” should be recorded in all children, and proper counseling for healthy lifestyle and diet should be made available for every child and parent. This is the optimal way to fight the tide of obesity threatening our children – and theirs – with obesity-related morbidity in the future.

References
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