

**P008** Metabolic Syndrome and Related Insulin Levels in Iranian Obese Children (Primary report)

Pantea Ebrahimpour, Hossein Fakhrzadeh,

Rasoul Pourebrahim, Anahita Hamidi,

Mohammad Jafar Mahmoodi, Bagher Larijani.

*Endocrinology & Metabolism Research Center, Doctor Shariati Hospital, Tehran University of Medical Sciences, Tehran, Iran*

*Objective:* Insulin resistance syndrome is a cluster of metabolic abnormalities which is accompanied with an increased risk of diabetes and cardiovascular diseases. This has become an important problem in urban children due to their increasing levels of obesity. *Methods:* 535 obese 7-11years students of all the primary schools of the 6th district of Tehran were screened according to their waist circumference. Waist circumference, fasting serum triglycerides, high density lipoprotein-cholesterol, blood pressure, fasting plasma glucose and insulin levels were measured. *Results:* The crude prevalence rate of metabolic syndrome in these children was 20.6%. There was no significant difference between genders. The most common metabolic abnormality was hypertriglyceridemia and the less common one was low HDL levels. All the components of the metabolic syndrome were significantly more common in obese children with metabolic syndrome, except HDL levels. Moreover, insulin levels were significantly higher in these children. *Conclusion:* The prevalence of metabolic syndrome is high in Iranian obese children. Early intervention in this population is needed not only to increase their life quality but also to decrease the future burden of diabetes and cardiovascular diseases on the society.