At the first annual meeting of the European Association for the Study of Diabetes we presented a paper entitled "Essential hyperlipemia, obesity and diabetes" (1). From the observations made in our patients we concluded for the existence of "a plurimetabolic syndrome including hyperlipemia, obesity and diabetes". Moreover, we stated that "the development of ischemic heart disease and, less frequently, of arterial hypertension is often found in these patients".

Interestingly enough, this early description of the association of clinical and metabolic abnormalities, highlighted the tenet of the heterogeneity of these patients with regard to hypertension. Indeed only about 50% of the patients with altered patterns of circulating lipids and glucose had also elevated blood pressure levels.

Our conclusion came from an exclusively clinical background, i.e. from the observation of the patients affected by an association of several metabolic disorders namely hyperlipidemia, diabetes or impaired glucose tolerance, obesity, hyperuricemia. We were far from considering hypertension as a metabolic disease at that time, as it would be now by some Authors.

Since then several Authors recognized the frequent association of the above mentioned diseases and each Author stressed some aspect of the syndrome.

In 1986 W.P. Castelli from the Framingham data observed that "a new syndrome, characterized by a high triglyceride level, a normal cholesterol level, and a low HDL level, appears to exist" (2). Overweight, diabetes mellitus, and often elevated serum uric acid levels were considered part of this syndrome. In this study the accent was on triglycerides.

In 1987 Ferrannini et al. (3) reported an association between impaired insulin induced extrahepatic carbohydrate utilization and hypertension in
lean patients with essential hypertension. These findings were in accord with the view that hyperinsulinemia contributes to the development of hypertension (5,6,7).

In June, 1988, R.R. Williams and coworkers published the results of a population study performed in Utah (U.S.A.) where they observed a syndrome consisting of hypertension, mixed lipid abnormalities (high triglycerides, high LDL, low HDL cholesterol), moderate obesity (4). In this study the accent was on hypertension.

In December, 1988, G.R. Reaven revisited the role of insulin resistance in human disease (4). In this review data are presented to support the hypothesis that resistance to insulin-stimulated glucose uptake, glucose intolerance, hyperinsulinemia, increased VLDL triglyceride, decreased HDL cholesterol, hypertension tends to occur in the same patient. This syndrome was called "syndrome X" and the basic point was related to hyperinsulinemia (8).

All these observations contributed greatly to a better understanding of the vascular risk in many patients and gave important hints to the research of the physiopathological mechanisms linking such different metabolic diseases as hypertriglyceridemia, obesity, diabetes, and, why not?, hypertension.

However, the definition of "Sindrome X" appeared slightly puzzling since this term had been already used for years to identify patients with chest pain normal coronary arteriograms, in whom symptoms are due to myocardial ischemia with reduced coronary perfusion reserve (9). Incidentally this latter group of patients also exhibit stimulated hyperinsulinemia (10). However, a more thorough drawback related to the use of the term "Syndrome X" in order to define the above mentioned constellation of symptoms, is the possible clouding of our understanding of the putative nature of the pathogenetic mechanisms, underlying the development of these clinical and metabolic abnormalities.

Beyond any question concerning how to indicate this syndrome which still seems to wait a clear definition, and for (question which we are now proposing our "plurimetabolic syndrome") we do believe that all the observations made in the patients must be put together to obtain the best complete description of this nosographic entity.

In our opinion as part of the "plurimetabolic syndrome" we must include a lipoprotein disorder (which could be hypertriglyceridemia and/or low HDL cholesterol with or without high LDL cholesterol), a carbohydrate disorder (which could be insulin resistance or impaired glucose tolerance or type 2 diabetes), a purine metabolism alteration and overweight or obesity.

Namely with the definition "Syndrome" we usually indicate a group of symptoms and signs of disordered function, related to one another by means of some anatomic, physiologic or biochemical peculiarity. It also