

Editorial

Seeking solutions to obesity

SEEDO celebrates a national congress every second year. Its scientific interest has been growing with the increase in obesity rates and with the medical concerns about its importance. Indeed, this year's meeting was declared to be of Medical Interest by the Spanish Ministry of Health and Consumer Affairs.

The meeting paid homage to an important scientific figure, Prof. Per Björntorp, whose death has left a huge gap in obesity research and its impact on cardiovascular risk. One of the closest collaborators with Prof. Björntorp, Dr Roland Rosmond, defended in his inaugural lecture one of the main lines of research of both, the relation between chronic stress and obesity. Dr Rosmond emphasised the role of cortisol in the diagnosis of stress linked to abdominal obesity. Stress, he pointed out, induces alterations in the hypothalamic–hypophysic–adrenal axis consisting of a loss of the normal response, so that the obese patient will show low plasma cortisol in the morning, resulting in low variations in daily cortisol levels, unlike the non-obese, non-stressed individual who shows high variability. Therefore, low plasma cortisol levels in the morning may well be one of the first signs of alterations to the hypothalamic–hypophysic–adrenal axis.

Childhood obesity, one of the most worrying problems for the health profession because of its increase during the last 15 years, was widely discussed, from a purely epidemiological or aetiopathological point of view to more clinical aspects, focusing on the increasingly frequent metabolic syndrome in childhood and adolescence. The diagnosis and treatment of the metabolic syndrome of these ages were analysed in detail.

Within this line of research, Dr D. McCarthy (London) presented data on body composition in childhood, data that are necessary if we are to understand the degree of adiposity, its evolution on the child and the result of any treatment of the adipose tissue.

The Congress included four interesting contributions regarding adipose tissue response with respect to lipogenesis and lipolysis: modifications in the composition of adipose tissue as a function of the quantity and type of fatty acids in the diet; the role of PPAR- γ and PGC-1 in adipogenesis and lipotoxicity phenomena and the relation between natriuretic peptides and lipolysis; and, lastly, the mechanism by which the UCP and brown adipose tissue are involved in lipolysis.

The reciprocal influence between the endocrine system and adipose tissue was discussed. Alterations in the

renin–angiotensin system in the obese, the effect of hormonal alterations during ageing-related changes in males and females on the response of adipose tissue and the onset of obesity, the state of knowledge of adiponectin and its implication in the existence or not of obesity, or the increasingly well-known role of gastrointestinal hormones in the regulation of appetite, and therefore in the mechanisms that influence the appearance of obesity, were all discussed.

There were two important debates on burning topics of the day: the first concerning whether a low-fat content or a low-carbohydrate content is more favourable in diets to treat obesity; the second on the pros and cons of gastric by-pass or biliopancreatic by-pass, and on completing the analysis of obesity therapy, the action of drugs, such as sibutramine, orlistat, rimonabant, β_3 agonist, antiepileptic drugs, metformin, thiazolidindiones, oleil–estrone, bupropion, leptine, neuropeptide YY and GLP-1.

The closing lecture was given by Dr B. Burguera, who, after a long stay in USA dedicated to obesity research and clinical medicine, has recently returned to Spain to continue his academic activity. In a lecture entitled 'Obesity epidemic. American lessons for Spain', Dr Burguera made a comparative study of the evolution of obesity in USA and the present situation in Spain, insisting that, besides the search for therapeutic remedies, clear guidelines for prevention from infancy should be in place.

During the Congress, SEEDO presented Dr Rosmond with a commemorative plaque of Prof. Per Björntorp and awarded the prize 'Professional Trajectory' (for an outstanding professional career) to Prof. Rafael Carmena, Professor of Internal Medicine and Head of the Endocrinology and Nutrition at the University Hospital of Valencia, whose wide curriculum vitae include very important clinical investigation into disorders of lipoprotein metabolism.

The fight against obesity requires a coalition of forces on many fronts: research, assistance, clinical and education. The Seventh meeting of SEEDO debated how to face this disease and how to combine knowledge to this end.

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