

Genes and waist measurement normalization in Amerindian obesity

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Obesity (“Globesity”) is probably the starting factor in many cases of Metabolic Syndrome (MS) or any of their associated pathologies. Although “obesity genes” may have been beneficial in the past, “thrifty genes”, a worldwide drastic food-intake change may have originated that hypertension, heart and vascular brain disease (MS-associated) are the main causes of mortality and morbidity throughout the World.

Amerindians (First America Inhabitants) did not have a normalized waist circumference measurement in order to obesity diagnosis. Southern Asia values were also taken for Amerindians. We have identified recently immigrated Amerindians to Spain by genetic and anthropological methodology and calculated their waist circumference normal values in order to define specifically obesity in Amerindians. These parameters are different to those of southern Asians. In addition, PC1, ppr-gamma and adiponectine genes have been studied in Amerindians and compared with biochemical data. Our results indicate that some biochemical parameters alteration and visceral obesity may be causative of MS and Type 2 diabetes.

Biography

Antonio Arnaiz Villena is presently Head of Immunology and Microbiology I Department at University Complutense and Hospital 12 de Octubre in Madrid, Spain. He was born and studied Biology and Medicine in Madrid. He accomplished post-doctoral research during 9 years in the UK at the Middlesex Hospital Medical School (Prof Roitt) and at the London Hospital Medical College (Prof Festenstein). He came back to Spain and set up Immunology and Genetics laboratories in the Spanish National Health Service in Madrid (Hospital Ramon y Cajal, The Madrid Regional Blood Center and Hospital 12 de Octubre). He was also appointed in Madrid Full Professor of Immunology by an International Board, including Pablo Rubinstein and Antonio Coutinho. He has established Immunology teaching at Biochemistry, Medicine, Biology, Pharmacology, Veterinary Faculties at University Complutense, Madrid. He has served 5 years as elected President of the Spanish Society for Immunology and 14 years in the Government Spanish Board for Specialists. He has published 341 papers in international magazines, published 8 books and directed 48 Ph.D. Doctoral Theses in Immunology, Obesity, Human and Bird Population Genetics and Linguistics.

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