CORPORAL IMAGE SATISFACTION IN RELATION TO BODY COMPOSITION IN A YOUNG POPULATION FROM THE BASQUE COUNTRY (SPAIN)

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The aim of this study was to evaluate body composition variations among different states of body image satisfaction and dissatisfaction. The sample was composed of 932 individuals from the Basque Country, Spain (306 men, 626 women aged 18–30). Williamson silhouettes collection (2000) was used to assess satisfaction degree. Four anthropometric measures (height, arm, waist and calf circumferences) and two bioelectrical measurements (resistance and reactance; 50 kHz) were taken. Specific Bioelectrical Impedance Vector Analysis (spBIVA) was used to evaluate body composition. Bioelectrical values were projected on the specific tolerance ellipses from an Italo-Spanish reference population. Comparison between groups was performed using Hotelling's T2 and Student's t-tests. In men, the specific bioelectrical vector mean of the group with moderate dissatisfaction by excess was situated in the right quadrant of the ellipses (indicative of low cell mass) and toward the upper pole (indicative of high FM%). There were no significant differences in body composition between satisfaction and dissatisfaction by defect, and these groups are located near the median value of the ellipsis. In women, the specific vectors of groups with severe and moderate dissatisfaction by excess were in the left quadrant (indicative of high cell mass) and toward the upper pole. The group corresponding to body image satisfaction was in the lower left quadrant, which indicates a tendency to low FM%. The group with a slight dissatisfaction by defect was characterized by a smaller phase angle, indicative of less cell mass. There is a trend toward increasing FM% with increasing dissatisfaction by excess. Men and women differ in body composition characteristics associated to their body image satisfaction, women being more satisfied with a lower FM%. Body image dissatisfaction by excess tends to be related to FM% excess in men, while in women it seems to be more related to cell mass excess.

Keywords: *Specific BIVA; Body Composition; Body Image Satisfaction; Fat Mass Percentage*

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VARIATION IN FREQUENCY DISTRIBUTION OF PONTICULUS POSTICUS AMONG MODERN HUMANS: GENERAL OBSERVATIONS

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Ponticulus posticus is a non-metric feature located on the first cervical vertebra posterior to the lateral masses (other names: Kimmerle's anomaly, dorsal ponticle of the atlas). It is found in humans with a frequency of approximately 25% and is more common among non-human primates. The feature has attracted some attention, mainly because the presence of ponticulus posticus was thought to have an adverse effect on blood flow through the vertebral artery. Most of previous works focused on estimating frequencies of the feature within a study population, and little is known about factors affecting its variation in humans. We went through literature on this topic and analyzed frequency distribution of ponticulus posticus in modern humans. In addition we used our own data on 449 atlas vertebrae from 3 Russian and 3 North American osteological series. According to the results, complete ponticulus posticus is more common in males than in females and this pattern is repeatedly seen in most of the samples studied. As we can judge from available data, groups of African ancestry have higher frequencies of the feature compared to Caucasians, this is especially true