

## O-14 - NEURAL CORRELATES OF A FRAMEWORK MODEL OF BODY IMAGE DISTORTION IN ANOREXIA NERVOSA

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**Introduction:** Body Image Distortion (BID) is a key symptom of Anorexia Nervosa (AN). Behavioural research consider such symptom a multidimensional construct. However the majority of the Neuroimaging Studies (NS) conceptualize body image as unidimensional.

**Objective:** To provide a review of the literature about the NS on BID in AN and to classify the NS according to a multidimensional model of the BID as composed by the three widely accepted components: perceptive, affective and cognitive.

**Methods:** We used the Pubmed and Medline databases to search for relevant articles. We used “body image” or “body image distortion”, “magnetic resonance” or “SPECT” or “PET” or “voxel based morphometry”, and “anorexia” as keywords. We classified the degree of the involvement of the three components of BID as primary, secondary and no involvement on the basis of the fMRI tasks used.

**Results:** Using our three-component model, we found:

- 1) a high consistency among the NS findings in testing the perceptive component: principal alterations involved the precuneus and the Inferior Parietal Lobe (IPL);
- 2) a weak consistency among the NS findings in testing the affective component: principal alterations involved the insula, the prefrontal and the parietal cortex;
- 3) a moderate consistency among the NS findings in testing the cognitive component: principal alterations involved the amygdala and the IPL.

**Conclusion:** The NS can be useful to better understand the construct of the BID, Our speculative multidimensional model could be used by the NS to define more consistent protocols and tasks to investigate the BID in eating disorders.