

## P-556 - IS BODY IMAGE DISTORTION RELATED TO PAIN PERCEPTION IN PATIENTS WITH EATING DISORDERS?

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**Background:** Body image distortion and denial of illness are important characteristics of eating disorders, mainly anorexia nervosa. In these patients, several studies have found decreased pain sensitivity but the physiological and psychological factors of this abnormality remain unclear.

**Methods:** In present study we analyzed relationship between body dissatisfaction and pain perception in 66 DSM-IV diagnosed patients with eating disorders (38 anorexia nervosa and 28 bulimia nervosa) and in 30 healthy control women. Patients were age and illness duration matched. The pain threshold latencies on radiant heat stimuli were measured using the Analgesia Meter (IITC Life Science USA). Body image perception (BIP) and objective (DIS 1 desired/real size in pixels) and subjective (DIS 2 desired/estimated size in pixels) dissatisfaction were measured using software Anamorphic Micro (digital pictures of their own body image were distorted to fat-body image and thin-body image).

**Results:** In bulimia nervosa or in patients with self-injurious behavior, thermal pain threshold latencies correlated positively with objective dissatisfaction with one's own body ( $r = 0.46$ ,  $p = 0.01$ ;  $r = 0.36$ ,  $p = 0.05$ , respectively). None of measured pain characteristics correlated with body image perception (estimated size/real size). In the control group there was no significant correlation between body and pain perception described. Objective dissatisfaction also negatively correlated with Body Attitude Test (BAT) commonly used in eating disorders research.

**Conclusions:** In patient with eating disorders, pain perception is associated with emotional but not with sensory (visual) processing of their own body images.

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