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Body size estimation in obesity: a novel insight from the implicit/explicit model of body representations

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Background: Individuals affected by obesity often report body representation impairments that involve a distorted perception of body size. Previous experimental studies of body size estimation in obesity have provided an inconsistent pattern of results. These controversial experimental findings will be interpreted in the light of a renewed theoretical framework, the *implicit/explicit* model of body representations. Finally, I will present our recent research that purports to investigate the possible distortions of the implicit body representation that have been scarcely explored in individuals affected by obesity. **Methods:** An adapted version of the body landmarks detection task was adopted. Participants had to locate each fingertip and knuckle of a hidden hand. The distance between each fingertip and knuckle was then used as an implicit measure of the represented fingers length and the distance between the little finger and the index was used as an implicit measure of the represented hand width. **Results:** Coherently with previous studies, healthy weight individuals underestimated fingers length and overestimated hand width. Interestingly, a comparable pattern of distortions was found also in obesity. Thus, the two populations seem to have a similar implicit body representation. **Conclusions:** Body dissatisfaction might have a role in the distortions previously found in the explicit body representations of individuals affected by obesity, while the implicit body representation might be unaffected by emotional factors.

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Psychiatric morbidity and sleeping disorders in psychodermatologic patients

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Background: Considered the less literature about psychological comorbidity with psychocutaneous disease in Chinese patients, the aim of this study was to evaluate the situation of anxiety and depression as well as the sleeping quality in the psychodermatologic patients. **Methods:** A consecutive cross-sectional study was conducted in a dermatology clinic. Anxiety and depression were assessed by means of the Hospital Anxiety and Depression Scale (HADS) while sleep quality was assessed by means of the Pittsburgh

Sleep Quality Index (PSQI). **Results:** A total of 557 patients with psychocutaneous disorders filled in the questionnaires, among which 186 were male and 371 were female, aged 19 to 75 years. 20.8% patient had a HADS-A score higher than 7 while 43.4% patients had a HADS-D score higher than 7. The mean HADS-A, HADS-D, PSQI was 5.28 ± 3.012 , 7.19 ± 2.874 and 5.48 ± 2.869 respectively. The highest HADS-A score was seen in nodular pruritus patients (8.67 ± 6.351) whereas the highest mean HADS-D (8.57 ± 3.370) in pruritus patients. The highest mean PSQI score (7.00 ± 3.606) was also seen in nodular pruritus patients. Depression was more frequently in patients with acne (55.0%), melasma (32.2%) and alopecia areata (31.0%). Anxiety was more frequently in acne (54.3%), melasma (34.5%) and seborrheic dermatitis (31.9%). Poor sleep quality (PSQI>6) was seen in 47.2% patients, especially for patients with pruritus, vitiligo, atopic dermatitis, and focal hyperhidrosis. **Conclusions:** Sleeping disturbance was highly prevalence and depression disorders were more common in Chinese patients with psychodermatologic problems.

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Cognitive Behavior Therapy for emotional disorders in asthmatic patients

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Background: Asthma is a multifactorial chronic inflammatory respiratory disease that appeared to be associated with negative emotions. Previous studies suggested that Cognitive Behavior Therapy (CBT) has a consistent positive effect on asthma-related quality of life and depressive symptoms. However, little is known about the mechanisms that underlie these effects. With the development of neuroimaging techniques, it has become increasingly possible to observe the neurobiological underpinnings of CBT. Thus, we explored the possible alterations of brain function before and after CBT in asthmatic patients. **Methods:** Asthmatic patients and healthy controls (HC) both received resting-state functional magnetic resonance imaging (rs-fMRI) scan and clinical assessments at baseline. 17 patients completed the CBT course consisting of 8 sessions, then received rs-fMRI scan and clinical assessments. **Results:** After CBT, ReHo values in the bilateral calcarine sulcus, occipital lobe, left paracentral lobule and right sensorimotor cortex (SMC) were found to reverse in asthmatic patients. In addition, certain abnormal insular functional connectivity (FC) of patients also showed reversion after CBT. Moreover, some FC values was significantly correlated with the reductive ratio in depressive symptoms and asthma control scores.

Conclusions: CBT is effective in improving asthmatic patients' depression severity and asthma control level. Moreover, successful CBT might be associated with a reversed effect on the coordination of spontaneous brain activity in the bilateral occipital lobe and SMC, and certain insular FC.

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