

The evaluation of affective homeostasis in patients with functional neurological disorders

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Introduction: At the base of neurofunctional disorders, there is an alteration of attentional systems causing intermediate-level motor predictions to elicit movement errors and false attribution of agency [1]. Salient precision is erroneously assigned to sensorial inputs according to the activation of one of the seven basic emotional systems [2]. The symptom is interpreted by the patient as stemming from a particular body district. In the Freudian perspective [3], this is interpreted as a compromise formation in a conflict between cognitive and affective processes. In this model, in DNF, mental pain is disowned by the agent's consciousness, but it is still "felt" as a bodily symptom.

Objective: The objective is to explain the relationship between informational and neurobiological models and the psychoanalytic one, showing that such an intersection may help clinicians better understand functional symptoms.

Methods: The patient accepted psychological support after the functional diagnosis. Tests were administered before the course, at the end, and at follow-up two months later. Specifically, the tests used were the Affective Neuroscience Personality Scales [4], the SWAP-200 [5], and the Visual Analogue Scale [6].

Results: Functional symptoms are secondary to predictions, whereas agency is misguided by affective saliency. This misperception may yield a motivationally-driven intolerance of a specific content which is thus "highjacked" towards correlated body districts. Specific present-day life events may lead in patients with DNF to the re-emerging of abnormal automated adaptive solutions. Psychological support may help the patient to reconcile with the actual meaning expressed by the dysfunctional symptom.

Conclusions: An interdisciplinary (neurological and psychological) dialogue is advisable to share these implications with the long-term purpose of creating a clinical attitude to integrate the understanding of the (subjective) significance for the patient of these symptoms with the neurological (objective) definition of Functional Neurological Disorders.

References:

- [1] Edwards et al., 2012. *Brain*; 135(11): 3495–3512.
- [2] Panksepp, 1998.
- [3] Freud, 1915. Vol 14(pp. 146–164).
- [4] Davis et. al., 2003. *Neuropsychoanalysis*; 5(1): 57-69.
- [5] Shelder et. al., 2007. *Journal of Personality Assessment*; 89, 41–55.
- [6] Hayes et. al., 1921. *Psychological Bulletin*; 18, 98-99.