THE CONTRIBUTION OF COGNITIVE-BEHAVIORAL THERAPY TO THE TREATMENT OF OBSESSIVE-COMPULSIVE DISORDER

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Abstract:
By the nature of specific clinical manifestations, obsessive-compulsive disorder is a unique psychiatric nosology, requiring a distinct approach to treatment. The currently existing debate in the psychiatric and psychotherapeutic medical environment refers to the type of treatment and the existing scientific validity at the moment. Cognitive-behavioral psychotherapy has a strong scientific support that recommends it as a stand-alone intervention or along with medication to treat the obsessive pathology.

Keywords: obsessive-compulsive disorders, cognitive-behavioral therapy, the dorsolateral prefrontal cortex, exposure with response prevention, cognitive restructuring.

As with many other psychiatric nosologies, the OCD etiopathology is mostly made up of bio-psycho-social dysfunctions. Neuroimaging has found that the OCD involves a dysfunction located in the cortico-striatal-thalamic-cortical, with extensions in the amygdala, hippocampus, the anterior cingulate cortex and dorsolateral prefrontal cortex (4) (5) (6) (7) (8). At the level of neurotransmitters, a mutation was discovered in the hSERT gene, called 1425V, resulting in a decrease in the level of serotonin in the neuronal synapse (9). Another biological aspect of TOC, consists of a specific increase in the intensity of symptoms of OCD or tics, in infants with a neuropsychiatric disorders, infections related to the presence of beta-hemolytic streptococci of group A (10) (11).

The theory of cognitive behavioral therapy (CBT), advances the idea that intrusive thoughts would be perceived by the patient as hazardous / catastrophic, resulting in the emergence of anxiety / depression. After all, everyone presents intrusive thoughts, but patients with OCD gives them a much greater significance and interprets them in a different sense. Social factors that contribute to the triggering / amplification of specific symptoms of this disorder are correlated with adverse life events, ie the distress caused by these events (12) (13).

CBT EFFICIENCY IN OCD AND THE REPRESENTATION BY NEUROIMAGING

Two meta-analyses, first taking into account 19 studies conducted between 1980 to 2006, and the second taking into account 37 studies conducted between 1993 and 2014, measured the effect technique Exposure Prevention Response (ERP) compared to the overall effect of CBT. The results of the two meta-analyses, and other studies indicate that CBT is effective in the treatment of OCD, thus revealing that the ERP and the Restructuring Cognitive (CR) technique are the most effective in addressing the TOC (14) (15) (16). Both the standard and the intensive CBT are effective in addressing the obsessive pathology. However, a more recent meta-analysis that includes 17 clinical studies shows that the CBT intensive therapeutic effect is installed faster compared to the CBT standard, but after three months of treatment this difference disappears, both forms being equally effective (17).

However, if there is a drug-resistant OCD, several factors contribute to achievement of the positive therapeutic results through the use of psychotropic medication combined with CBT (18). Getting an effective therapeutic response may be adversely affected by the presence of a serious OCD symptomatology, comorbidity of depression, somatoform disorders of high intensity or low levels of insight (19). Psychotherapeutic cognitive behavioral intervention combined with antidepressant medication / antipsychotic contribute in such cases to decrease anxiety / depression, and not least of symptoms caused by OCD (20) (21) (22).

It is known that a combination of psychiatric medication with psychotherapy determines significant changes in the patient's brain (23). This is true, however, in the separate evaluation of the two therapeutic forms (24) (25) (26). Through direct influence on the brain caused by changes produced in the neuronal circuits with direct / indirect field of epigenetic effect of cognitive-behavioral therapy (CBT) on the brain, it may be considered in some cases, similar to psychotropic medication, more accurately, identical to a., epigenetic action drug "(27).

When referring to anxiety disorders, it appears that cognitive therapy (CT) acts mainly by gains in ventral and dorsal anterior cingulate cortex (ACC), the PFC median (mPFC), and not least the right cortex ventrolateral. Simultaneously, there is a decline in activity in the amygdala, hippocampus and medial temporal

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Behavioral Therapy (REBT), produce clinical improvement within tolerance uncertainty / decrease in response to stimuli anxiogenic, a change in the scope of dysfunctional beliefs / irrational faiths and more compliance to treatment in these patients (48) (49). Lastly, the role of cognitive techniques is to prepare the patient for behavioral exposures that will be performed within therapy (50).

Thiel et al. (2016) in a pilot study, applied a combination therapy of the Scheme Centered Cognitive Therapy (ST), and ERP which they called a STERP, with OCD patients resistant to standard CBT intervention. The results of this study showed that after 12 weeks of treatment, there was a significant remission of the symptom of the TOC in the patients included in the study. These results remained stable after six months from the end of the intervention, a period in which the applied intervention CBT and ERP, indicating that the ST in combination CBT and ERP can be an alternative to the TOC resistant to intervention with CBT standard (51).

**ACCEPTANCE AND COMMITMENT THERAPY IN OCD**

Acceptance and Commitment Therapy (ACT) CBT is a psychotherapy belonging to the next generation (the third wave). By using philosophical pragmatism called functional contextualism (52) (53), ACT can be effective in addressing obsessional pathology, particularly due to increasing psychological flexibility (54). Psychological interventions consist of acceptance exercises or use of metaphors by the therapist in order to increase psychological flexibility of these patients. Other techniques consist in confronting mental obsessions and the awareness of emotions associated with these obsessions. Cognitive diffusion techniques serve to help the patient understand that obsessions and anxiety are directly connected more with his subjective experiences than the events of real life and that ultimately a thought is nothing more than a thought, in other words there is a big difference between thought and action (55). Beliefs / thoughts are not good or bad innately, but the interaction with stimuli and not least the significance attached to these stimuli lead to the division between positive or negative. If the patient with OCD responds to unexpected stimuli (intrusive thoughts / obsessions) as if they were real or would come from the real world, in other words map and territory are parts of a whole, the thought then becomes synonymous with the act / behavior (56). Another important aspect of the relational context (RFT), refers to the appearance of psychological discomfort by organizing the reports in a manner which causes irrational dysfunctional behavior. For example a patient may have the following intrusive / obsessional thought, if I do not follow the same route every day to go to college, my mother will die ", this thought is followed by a sense that the patient attaches to the thought. , if mom is going to die because I did not follow the same route every morning, it is a catastrophe and it is all happening just because of me. ". Thought the fusion between action and through the patient sees the situation as it would have happened already or would be about to happen, meaning ,, hot cognition "is .. is awful and it would be a tragedy / disaster if mother would die because of me ", this thought is followed by mental neutralization ,, will follow the same route every day to avoid this to happen to me , so that I do not feel guilty and
accountable " (57), this thought generating anxiety, the final consequence is the emergence of rituals / compulsion. For this reason, before starting behavioral exposure techniques, the intolerance to uncertainty should be addressed directly and the thought-action fusion, through specific cognitive ACT diffusion techniques (58).

Perfectionism is a cognitive distortion that occurs generally because of the central beliefs or personality traits, which makes the patient using repetitive and contextual phrase must (59) (60). This must has an imperative connotation that contributes to increasing psychological inflexibility, including in patients with OCD. For instance if a person says , if you want to be a good student, you must go to class, "then must has a positive valence. Conversely if the same person says , I must be the best in all the examinations which I will sit in college, "then must has a negative value. The reason relates to the fact that nobody can be perfect and can not always succeed in all conditions. In fact, behind this must is the fear of failure, in other words the fear of liability (61) (62). Especially in obsessive pathology, the approach to perfectionism is by using cognitive restructuring techniques, the use of metaphors and not least using catastrophe avoidance techniques. Meanwhile, these techniques can be complemented with specific ACT techniques such as accepting, this resulting in reducing suppression of thought, and not activating the vicious circle of negative automatic thoughts / obsessions. Unconditional acceptance of oneself is an unevaluated system, uncritical and only refers to the highlighting of errors through isolated / contextual behaviors and acceptance of the fallible nature of the individual (63) (64).

Mindfulness site used as a therapeutic technique is a viable choice only when it is practiced in a practice, by a therapist, self-applied techniques of mindfulness do not have the desired effect in OCD (65). CONCLUSIONS

Due to the complexity and bio-psycho-social deficits present in OCD, this approach requires a medical-psychological type multidisciplinary clinical pathology. Depending on the severity of symptoms, the psychiatrist may choose as mono-therapeutic treatment option, which may consist in medication / CBT or a combination of both methods of treatment. Due to the fact that the effect of CBT on brain / neuro-transmitters is similar to the SSRIs, it can be used as a means of increasing and can replace large doses of medication / augmentation with another medication. This way the occurrence of specific side effects is avoided. In terms of CBT’s the combination of ERP and cognitive restructuring, is the first-line intervention in the TOC, and in some cases they may be supplemented by ACT techniques such as cognitive acceptance and diffusion. Lastly, psychotherapeutic interventions may be supplemented by programs / web sites that contribute to facilitate the therapeutic process.

Abbreviations:
OCD = Obsessive-Compulsive Disorder  
CBT = Cognitive-Behavioral Therapy  
ERP = Exposure with Response Prevention  
CR = Cognitive Restructuring  
ACT = Acceptance and Commitment Therapy  
EX / RP = Exposure and Ritual Prevention  

References:
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