ANTIDEPRESSANTS, ANTIPSYCHOTICS AND PSYCHOTHERAPY FOR BORDERLINE PERSONALITY DISORDER

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Borderline personality disorder is characterized by intense, rapidly fluctuating emotional states and moods combined with impulsivity and interpersonal difficulties. The management of patients with borderline personality disorder is often challenging, with substantial risks of inappropriate or insufficient treatment. Psychotherapy is the first-line treatment for borderline personality disorder. However, some medication strategies exist that can offer additional support in conjunction with psychotherapy.

Keywords: borderline personality disorder, selective serotonin reuptake inhibitors (SSRIs), antidepressants, antipsychotics, medication, Communication-Focused Therapy®, CFT, psychotherapy, psychiatry

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Table of Contents

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Introduction

Borderline personality disorder is characterized by severe functional impairments, a high risk of suicide, a negative effect on the course of depressive disorders, extensive use of treatment, and high costs to society. (Leichsenring et al., 2011) There is increasing consensus that borderline personality disorder (BPD) is characterized by 3 related core features: severe emotion dysregulation, strong impulsivity, and social-interpersonal dysfunction. (Fonagy et al., 2017) The course of this disorder is less stable than expected for personality disorders. The causes are not yet clear, but genetic factors and adverse life events seem to interact to lead to the disorder. Neurobiological research suggests that abnormalities in the frontolimbic networks are associated with many of the symptoms. (Leichsenring et al., 2011) From another perspective, since trauma tends to play a key role in the development of both complex PTSD and BPD, it has been suggested to subsume BPD within a wider complex PTSD diagnosis. (Kulkarni, 2017) However, in clinical practice there is considerable doubt that trauma is a significant cause in every BPD patient.

In inpatient settings, pharmacotherapy is highly prevalent in the management of BPD (Timäus et al., 2019), while there remains a dearth of high-quality research evidence to help patients, carers, and clinicians make sound and safe evidence-based decisions about medicines to treat BPD. (Hancock-Johnson et al., 2017) Specific forms of psychotherapy seem to be beneficial for at least some of the problems frequently reported in patients with borderline personality disorder. At present, there is no evidence to suggest that one specific form of psychotherapy is more effective than another. (Leichsenring et al., 2011)

Medication

Drug treatment of patients with borderline personality disorder (BPD) is common but mostly not supported by evidence from high-quality research. (Stoffers & Lieb, 2014) In a literature review, results for the effectiveness of antipsychotics appeared to be mixed. There has been little recent evidence to

support the use of mood stabilizers. There is a lack of placebo-controlled, randomized controlled trials investigating antidepressants and limited evidence to support the use of opioid antagonists. (Hancock-Johnson et al., 2017) It seems that several types of medication are used off-label on a symptomatic basis. However, with virtually no empirical support for most of them, psychopharmacology should not come at the expense of other proven approaches, such as psychotherapy.

Neurobiology

Studies of neurobiological mechanisms in borderline personality disorder (BPD) have increased our understanding of the pathophysiology of its development and course. Less is known about how psychotherapy may influence these neurobiological factors, and also whether biomarkers may predict psychotherapy outcomes. Marceau and colleagues reviewed fourteen studies providing data from 467 BPD patients, investigated biomarkers predicting response to psychotherapy for BPD or examined neurobiological factors altered by psychotherapy. Eleven neuroimaging studies used mostly functional magnetic resonance imaging methods to scope brain regions related to emotion regulation and cognitive control, and three studies examined genetic or neuroendocrine markers. The evidence suggested that psychotherapy alters neural activation and connectivity of regions subserving executive control and emotion regulation. Hypoactivation in prefrontal and cingulate regions predicted treatment response. (Marceau et al., 2018) It has also been suggested from a neurobiological side that the core characteristic of BPD may be an impairment in emotional interoception or alexithymia. (Perez-Rodriguez et al., 2018)

Targeting Symptoms

Rather than treating borderline personality disorder ‘directly’, medication strategies usually target constellations of symptoms, such as emotional or mood fluctuations. Lieb and colleagues noted in a Cochrane review that beneficial effects were found for the mood stabilizers topiramate, lamotrigine and valproate semisodium, and the second-generation antipsychotics aripiprazole and olanzapine. However, the robustness of findings was low, since they were based mostly on single, small studies. Selective

serotonin reuptake inhibitors were found to lack high-level evidence of effectiveness. (Lieb et al., 2010) An individualized, tailored pharmacotherapy for BPD that targets the prominent symptom clusters can improve relevant aspects of the clinical picture. However, no medication is indicated to treat the global psychopathology of BPD. Polypharmacy should be avoided or strictly limited. To date, pharmacotherapy alone does not suffice to manage the complexity of BPD. (Bozzatello et al., 2020)

Medication Groups

In a retrospective evaluation of the treatment of 87 inpatients with BPD between 2008 and 2012, all classes of psychotropic drugs were applied. They found high prescription rates of naltrexone (35.6%), quetiapine (19.5%), mirtazapine (18.4%), sertraline (12.6%), and escitalopram (11.5%). Compared to 1996–2004, rates of low-potency antipsychotics, tri−/tetracyclic antidepressants and mood stabilizers significantly decreased while usage of naltrexone significantly increased. Quetiapine became more preferred, and older antidepressants and low-potency antipsychotics were avoided. Opioid antagonists were increasingly used and have been suggested for further investigation. (Timäus et al., 2019)

In a review of evidence up to August 2014, there was some evidence for beneficial effects for BPD patients by second-generation antipsychotics, mood stabilizers and omega-3 fatty acids, while the overall evidence base was still unsatisfying. The dominating role SSRI antidepressants usually play within the medical treatment of BPD patients was neither reflected nor supported by corresponding evidence. (Stoffers & Lieb, 2014)

The second-generation antipsychotic olanzapine and the serotonergic antidepressant sertraline appear to be effective in alleviating symptoms of patients with various types of personality disorder, where drug addiction can be common. In a study with 120 patients chosen for methadone maintenance therapy, olanzapine and sertraline were effective in ameliorating symptoms of depression, anxiety and aggression, reducing sensitivity in interpersonal relationships and alleviating obsessive symptoms, pessimistic behaviors and somatization disorders in patients with personality disorders on methadone maintenance therapy. (Jariani et al., 2010)

Aripiprazole seems to be an efficacious and well-tolerated add-on treatment for sertraline-resistant BPD patients. It acts on impulsive and psychotic-like symptoms. In one study, twenty-one outpatients with a BPD diagnosis who did not respond to sertraline, 100–200 mg/day for 12 weeks, were treated for 12 weeks with the addition of aripiprazole, 10–15 mg/day. Patients were assessed at baseline, week 4, and week 12. Five patients (23.8%) dropped out due to anxiety/insomnia or non-compliance. Nine patients (56.3%) were responders. Significant changes were observed in the CGI-S, BPRS, BPDSI total score, BPDSI "impulsivity" and "dissociation/paranoid ideation" items, and BIS-11. Adverse effects reported in the study were mild headache, insomnia, and anxiety. (Bellino et al., 2008)

Psychotherapy

Borderline personality disorder is a term which comes from psychodynamic psychotherapy and was originally conceived to signify a state of psychological functioning ‘on the border’ between neurotic and psychotic. Psychotherapy is considered the primary treatment for BPD. Individuals diagnosed as having BPD were historically considered to be “hard to reach,” and pessimism with regard to treatment prevailed. This view has changed over the past decades, mainly as a result of emerging evidence for the efficacy and cost-effectiveness of specialized psychotherapies for individuals with BPD. (Fonagy et al., 2017) A systematic review of the literature over five years indicated that patients with various severities benefited from psychotherapy, that more intensive therapies were not significantly superior to less intensive therapies, enhancing emotion regulation processes and fostering more coherent self-identity were important mechanisms of change, and that therapies had been extended to patients with BPD and posttraumatic stress disorder. (Links et al., 2017)

Currently, there are four comprehensive psychosocial treatments for BPD. Two of these treatments are considered psychodynamic in nature, including mentalization-based treatment and transference-focused psychotherapy. The other two are considered to be cognitive-behavioral in nature, including dialectical behavioral therapy (DBT) and schema-focused therapy. (Zanarini, 2009) Treatment guidelines for borderline personality disorder recommend psychotherapy as an important, if not essential, component of patient care. (McLaughlin et al., 2019) Combining medication with psychotherapy may improve specific

BPD symptom dimensions. In particular, it may help those aspects that respond slowly or not at all to monotherapy. (Bozzatello et al., 2020)

From a psychological perspective we understand more about the unstable and intense interpersonal relationships, feelings of emptiness, bursts of rage, chronic fears of abandonment, intolerance for aloneness, and lack of a stable sense of self as stemming from impairments in the underlying attachment organization. In a study by Levy and colleagues, factor analysis revealed six factors that clustered into three groups corresponding to an avoidant attachment pattern, a preoccupied attachment pattern, and a fearfully preoccupied pattern. The preoccupied pattern showed more concern and behavioral reaction to real or imagined abandonments, whereas the avoidant group had higher ratings of inappropriate anger. The fearfully preoccupied group had higher ratings on identity disturbance, although only at the trend level. (Levy et al., 2005)

Integration

Various therapeutic approaches have shown their effectiveness, and the author has already argued elsewhere that it is the work with communication, and communication patterns more specifically, which bring about change (Haverkampf, 2010, 2013, 2017b, 2018). The most effective treatments for borderline personality disorder consist of specialized psychotherapies specifically developed for this clinical population, while the empirical data points to strong commonalities between all therapies shown to be effective in clinical trials. (Paris, 2015)

In general, it has been shown that psychodynamic and cognitive-behavioral psychotherapy can both be helpful in their own ways. In a literature review, each of the lengthy and complex psychotherapies significantly reduces the severity of borderline psychopathology or at least some aspects of it, particularly physically self-destructive acts. (Zanarini, 2009) Other therapies aside from the ones already mentioned include also Schema-Focused Therapy (SFT) or Transference-Focused Therapy (TFP). In a multicenter, randomized, 2-group design, and eighty-eight patients with Borderline Personality Disorder, three years of SFT and TFP showed to be effective in reducing borderline personality disorder–specific and general psychopathologic dysfunction and measures of SFT and TFP concepts and in improving quality of life. SFT appeared more effective than TFP for all measures, however. (Giesen-Bloo et al., 2006) Mentalisation finds a place in many therapies, particularly the more introspectively oriented ones. The concept of

mentalisation covers a specific structural aspect of the personality and is defined as the ability to understand and interpret one's own and others' behaviors as expressions of intentional mental states. People with borderline personality disorder typically show an unstable capacity for mentalisation characterised by the re-emergence of prementalistic modes of thinking. (Fischer-Kern et al., 2015)

Communication

Awareness of and experimentation with different communication patterns in the session play a central role in the success of the therapy (Haverkampf, 2010). The attunement of the therapist to the patient, and of the patient to the therapist, allow for the foundation change can be built on. For example, a study of 382 sessions that involved 21 female patients, the amount of silence in different speaker-switching patterns was not independent of one other. (Zimmermann et al., 2020)

The Therapeutic Alliance

The client- and therapist-rated therapeutic alliance has been highlighted in the prevention of suicide attempts and nonsuicidal self-injury. In a randomized controlled study 101 women with borderline personality disorder were in dialectical behavior therapy (DBT) or in community treatment by experts. Client ratings of commitment and working capacity were associated with fewer suicide attempts in DBT. Client ratings of commitment were also associated with reduced nonsuicidal self-injury in DBT only. Therapist ratings of the alliance were predictive of reduced suicide attempts in both treatments. Therapist ratings of the alliance in community treatment by experts were predictive of increased nonsuicidal self-injury. (Bedics et al., 2015) From a communication-focused perspective, the therapeutic alliance makes it possible to create greater awareness for communication patterns, to reflect about them, and to experiment with them (Haverkampf, 2017a). Particularly in a personality disorder, which affects how a patient communicates with themselves and with others, a working basis between client and therapist that allows for the freedom and openness that the patient can be himself or herself is of crucial importance. It also allows the therapist in turn to be more direct, more open, and clearer in the interactions with the patient. One needs to keep in mind that communication fundamentally lives by the same rules, whether

this be thoughts, emotions or perceptions of external sources. More open and freer communication also helps the therapist to more easily practice empathy and better understand the patient.

Group Psychotherapy

Group psychotherapy should not only be seen as a low-cost alternative to individual therapy. The dynamics in group therapy can have a significant therapeutic effect in themselves, which are often more than a complementation of individual therapy. Experience is needed as therapist to keep alert to the many different communication patterns and dynamic in a heterogenous setting with several patients. However, creating awareness and working with communication patterns in such a setting can also be very rewarding for patients and therapist (Haverkampf, 2017a). In a meta-analysis of twenty-three randomized controlled trials involving group therapy with 1,595 participants, group psychotherapy had a large effect on reduction of BPD symptoms and a moderate effect on suicidality or parasuicidality symptoms. There was a small to medium effect in favor of group treatments for secondary outcomes, such as anxiety, depression, and mental health overall. (McLaughlin et al., 2019)

Dialectic Behavioral Therapy (DBT)

The adjective ‘dialectic’ stems from the philosophical concept of dialectics, which highlights the process of synthesizing oppositions. (Linehan & Wilks, 2015). According to Linehan (Linehan & Wilks, 2015), DBT can be broken down into four stages, where the goals are to

1. decrease imminent life interfering behaviors, such as suicide attempts and non-suicidal self-injury, reduce therapy interfering behaviors (e.g. missing treatment, behaviors that are burning out the therapist, refusal to collaborate with necessary steps for desired change), decrease client-guided, quality-of-life interfering behaviors (e.g. substance use, unemployment, homelessness), and increase skillful behaviors to replace dysfunctional behaviors (‘DBT skills training’)
2. control action but not emotional suffering (the stage of “quiet desperation”). The goal of treatment is for the client to experience the full range of emotions. PTSD is also treated.

3. reduce ordinary problems in living.
4. increase a sense of completeness, to find joy, and/or achieve transcendence.

Emotion dysregulation is a fundamental aspect of borderline personality disorder (BPD). Accordingly, one major focus of DBT is to teach strategies to regulate emotional reactions. DBT has demonstrated efficacy in stabilizing and controlling self-destructive behavior and improving patient compliance., while it appears only marginally better in reducing attrition and not significantly different from treatment as usual in reducing depression symptoms. (Panos et al., 2014)

As any form of effective therapy has an effect on information flows and the cell networks within the brain, so does apparently also DBT. Reduced activity and increased connectivity in neural networks related to salience processing and emotion regulation after therapy has been demonstrated. In one study using functional magnetic resonance imaging to investigate neural correlates of explicit emotion regulation, 32 female BPD patients showed after DBT decreased insula and anterior cingulate cortex activity during reappraisal. Anterior cingulate connectivity to medial and superior frontal gyrus, superior temporal gyrus, and inferior parietal cortices increased after DBT. Responders exhibited reduced activation in amygdala, anterior cingulate cortex, orbitofrontal, and dorsolateral prefrontal cortex together with increased connectivity within a limbic-prefrontal network during the reappraisal of negative stimuli after psychotherapy. Attenuated limbic hyperarousal together with an elevated coupling between limbic and prefrontal and inferior parietal control regions in BPD patients after successful therapy may indicate more efficient emotion regulation during reappraisal of negative pictures. (Schmitt et al., 2016)

Transference-Focused Psychotherapy (TFP)

Transference-focused psychotherapy (TFP) is a manualized psychodynamic treatment for borderline personality disorder. The treatment focuses on symptoms and self-destructive behavior and, in addition, aims to improve personality organization (Fischer-Kern et al., 2015). To compare transference-focused psychotherapy with treatment by experienced community psychotherapists. In a randomized controlled

trial 104 female out-patients were treated for one year with either transference-focused psychotherapy or by an experienced community psychotherapist. Transference-focused psychotherapy showed to be more efficacious than treatment by experienced community psychotherapists in the domains of borderline symptomatology, psychosocial functioning, and personality organization. Moreover, there is preliminary evidence for a superiority in the reduction of suicidality and need for psychiatric in-patient treatment. (Doering et al., 2010) Improvements in reflective function were significantly correlated with improvements in personality organization. (Fischer-Kern et al., 2015) Mechanisms of change at the level of the patient involve the integration of polarized representations of self and others; mechanisms of change at the level of the therapist's interventions include the structured treatment approach and the use of clarification, confrontation, and “transference” interpretations in the here and now of the therapeutic relationship. (Levy et al., 2006)

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