

Psychodynamic psychopharmacology in clinical practice – interpretations of the adverse impact of pharmacotherapy. Case report.

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Summary

Aim. Psychodynamic psychopharmacology offers the possibility of the implementation of psychodynamic thinking and interpretations in the process of the pharmacotherapy of mental disorders. It can be helpful in improving results of treatment and solving difficulties in its course.

Material and method. The case report of a female patient after a psychotic episode is presented. During the treatment with quetiapine the patient presented complaints about adverse effects like weight gain and somnolence. These symptoms (at least partially) resulted from her emotional problems and changed after psychodynamic interpretation. After stopping the medication the patient's reactions to stress and the process of separation from her mother changed dramatically. It was probably due to the discontinuation of medication.

Results. In some cases, adverse events of medication have not only biological but also emotional roots. If properly recognized, these can be interpreted and changed by psychological tools.

Conclusions. Psychodynamic psychopharmacology can be useful in the development of a deeper understanding and problem solving strategies in the process of the pharmacotherapy of mental disorders.

pharmacotherapy / psychoanalysis / antipsychotics / adverse events / interpretation

INTRODUCTION

Psychodynamic psychopharmacology creates opportunities for a more effective and attentive understanding of the entire therapeutic process, in which pharmacotherapy is applied in the treatment of mental disorders. It is a way of thinking about the pharmacotherapy of mental illness which takes into consideration both pharmacological and psychodynamic knowledge in a practical clinical approach and treatment-related decision making. This proves particularly relevant with patients who are medication-resistant,

display non-standard reactions to medication or refuse to cooperate [1, 2, 3].

A number of studies have been published regarding the psychodynamic understanding of pharmacotherapy in the treatment of patients with mental illness. They first appeared in print in the 1950's, when contemporary psychopharmacotherapy was first defined. Today, there is a noticeable renaissance of interest among authors of psychodynamic and psychoanalytical orientation, probably because of the increasingly widespread use of pharmacotherapy by patients who take advantage of psychotherapy (mostly with symptoms of depression, anxiety, adaptive disorders etc.), advances in neurobiology and many professionals' need to update their knowledge and practice to contemporary standards.

The pioneering publications on the psychodynamic interpretation of the impact of medication

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used in psychiatry appeared in the USA [4] and Canada [5, 6, 7, 8, 9]. They analysed the effect of the impact of medication from the point of view of psychoanalysis. These studies were continued by such authors as Gutheil [10], Roose and Johannet [11], Nevins [12], V. Kapsambelis [13], Gottlieb [14], Resnik [15] and Gabbard [16, 17, 18]. Later on, however, in the 1970's and 1980's, such studies were only sporadically published. Today, the increased interest in the problems of the relation between psychoanalytical knowledge and pharmacotherapy is the focus of entire monographic issues of professional magazines, such as *Revue Française de Psychanalyse*, which are dedicated to the issue of pharmacotherapy in psychiatry (*Les psychotropes sur le divan*, 2002;66) [19]. Other examples include articles in the *American Journal of Psychotherapy* [20, 21, 22], the 2006/3 issue of the *Journal of the American Psychoanalytic Association* [23], the 2007 series of studies from the Austen Riggs Centre published in the *Journal of American Academy of Psychoanalysis and Dynamic Psychiatry* (including amongst others works by D. Mintz and B. Belnap on psychodynamic psychopharmacotherapy) [1, 2, 24, 25], or the studies published in the *Bulletin of the Menninger Clinic* [26, 27, 28]. There is also Ostow [29], who published his first works in this subject area in the 1960's and is still actively researching and publishing new articles. Altogether a few dozen substantial publications have appeared in recent years, but any detailed discussion of these is beyond the aim and subject matter of this article.

The case study presented here illustrates an attempt to apply psychodynamic psychopharmacotherapy in clinical practice.

CASE STUDY

The subject is a 25 year old patient hospitalised in the psychiatric ward with a diagnosis of acute polymorphic psychotic disorder. Her medical record tells us that the clinical picture of her illness was dominated by a disorganization of psychic functions and an increased labile affect. Prior to hospitalisation, the patient cried often and could not function effectively. She only spoke in single unrelated words or disconnected sentences, stopped going to work and either stayed in

bed or paced around her parents' flat, in which she lived at the time. Finally, due to an intensified disorganisation of her speech and behaviour, difficulties with establishing rational contact and a state of increased agitation, she was hospitalized. She was medicated with quetiapine and after a while also with citalopram, because of her lowered mood after the initial few days. She was discharged in a much improved state and it was recommended that she continue pharmacotherapy and begin psychotherapy. The patient registered at the outpatient clinic, where she continued to be medicated with the drugs initially prescribed in the hospital.

In therapy it was revealed that her hospitalization was preceded by a break-up with her partner of a few years. The relationship was described as a peculiar emotional bond, in which the patient was entirely subordinated to her partner and was fused with him emotionally. She was always available to him, tried to meet all of his expectations, to have his thoughts and feelings. She was continually preoccupied with experiencing the relationship and thinking about it. In the interview she also told the therapist that she had a similar symbiotic emotional relationship with her mother.

Situation I

During the therapy session the patient complained of weight gain, which she thought was caused by taking quetiapine. She said: "I've put on a lot of weight since I've been taking quetiapine. I've already put on 6 kg. I've been thinking of food all day and I get up at night to eat. All I can think of is food". Weight gain is one of the most frequently reported adverse effects of second generation antipsychotic medication and it may be a side effect of taking quetiapine [30]; therefore the patient's complaints could have been treated routinely as the side effect of the medication. However, in a longer conversation with the patient and after the analysis of what she had said to date, it was suggested to her that she consider two options: first that she gained weight as a result of taking medication, and second that perhaps her increased appetite and weight gain happened for other reasons, especially feeling emotionally empty.

The patient said that when she was in the relationship with her former partner she did not feel like eating a lot but she felt that "her stomach was full and she had a lump in her throat". She also said: "I begin to eat a lot whenever I'm alone, and since I've split up with my boyfriend and moved out of my mother's house I have this sucking sensation in my stomach all the time, and it feels empty. When I'm with someone, food might as well not exist. I don't feel the hunger or the emptiness – I am excited and animated then, I don't have to eat. When I'm alone I miss this feeling so I begin to eat".

Eating and the relationship with her partner had a similar quality, which she described as follows: "Eating and my relationships with my boyfriend are both such that I feel bad afterwards, I feel aversion towards myself. Whenever I left my boyfriend's house I felt dirty, I felt aversion towards myself. When I eat a lot I also feel aversion towards myself; that it looks like I stuffed myself again."

The patient started talking about her feeling that subjectively she felt as if something important was missing from her inside. She said that she felt as if what was missing was: "... a filter of some sort, like I am filled with horrible dirt. When I lived with my mother at home, every day we talked from the early morning, and she talked things through.. Now that I moved out I have no one to talk to and I feel this dirt inside me". The following week, the patient came for her visit early and said that she had to leave early as well. After the previous conversation with the therapist, she stopped eating as much during the day and stopped getting up to eat at night. She began to take care of herself and joined a physical activity class. Her activities had a definite mark of hyperactivity and she felt much more anger towards the people from her immediate circle. The patient saw a relation between various aspects of the change in her mood. She said: "I'm not stuffing myself all the time so perhaps this is why I'm so angry".

The patient's relationship with her mother also changed considerably during this time. The patient started living alone. Her mother, who initially phoned her all the time and with whom the patient talked about everything she did and described every person she met, stopped phoning so much. The patient returned to work, in which

she was very much involved, and tried to spend as much time as possible at work. Her relationships with her colleagues have improved, especially with men, because as she said: "Things are different now because before I was crying all the time and didn't talk to anyone so I had no contact with people. Now, when we can have a normal conversation, they are delighted and they take care of me in spite of my anger".

During the holidays the patient stayed at her parents' house again. After this period she came for a visit and said that although she did not feel an increased appetite, she "slept all the time after this medication". She had never previously complained of drowsiness. During the interview, the patient was able to realize herself that she used the pretext of taking psychotropic medication to restrict contact with her family during the holidays. In the period under discussion, the patient took steps to separate herself from her family; the holiday stay with her parents was difficult for her emotionally, so the "drowsiness" occurred, which she experienced subjectively. This drowsiness let her participate only in family celebrations, whereas otherwise she spent most of her time alone in her room.

Situation II

The patient decided to stop taking quetiapine entirely of her own account and after a few weeks came for a visit. She said that she went back to live with her mother because she started feeling much worse once she stopped taking her medication. She felt increased anxiety and feared the world around her. Although she was able to live alone before, and separate herself from her parents and limit her contacts with them, now she behaved altogether differently. She lived with her mother, with whom she spent most of her time after work. When she was at home she spent practically all her time with her mother; only then did she feel safe. She felt that something bad could happen to her, so she demanded that her mother reassure her, tell her that everything was going to be alright. Each time before leaving home, she had spent a long time demanding that her mother reassure her that nothing wrong was going to happen to her and that everything was going to be fine. Her

mother put her to bed in the evening and sometimes she slept with her. The patient noticed that the way she felt changed when she stopped taking quetiapine and she thought that the calming effect that the medication had on her was now equivalent to the calming presence of her mother. She started calling her mother, apparently jokingly, with the name of the drug. During the visit she quoted the following exchange with her mother as an example. The patient to her mother: "Quetiapine, come here for a while"; Mother to the patient: "Quetiapine is busy in the kitchen cooking, can't come now."

Once she stopped taking quetiapine the patient had difficulties sleeping. The pattern of her excessive eating also changed. Now the patient started having attacks reminiscent of bulimia: she ate a lot in a very short time, for example when she came back from work, but she did not vomit.

DISCUSSION

The medication used in pharmacotherapy can have the effect of changing the way one feels subjectively, one's mood, ways of experiencing things and interpreting reality, ways of thinking of oneself and others, one's fantasies and impressions; it can influence the psychic structure, aims and aspirations of the person who takes it but also the possibilities of their realization, the way that various tasks in life are undertaken and the development processes that take place. Ostow, who has been studying pharmacotherapy analytically for over 40 years, thinks that, e.g., the impact of medication on the patient's mood influences the overall way of experiencing things and interpreting life's events, the way the patient perceives her- or himself, the type of fantasies she or he has and, through this extensive influence, the medication becomes the regulator of behaviour [29]. In this case study we can identify some important determinants of the impact of the medication within the patient's psychic structure and her attempts to undertake developmental changes (separation). When the drug is taken, the patient's psychic structure is clearly consolidated; she begins to be more self-reliant and autonomous, and takes steps to get stronger

independently from her parents and function independently, especially away from her mother.

It is the particular aim of this study to consider the fact that the patient's complaints, her accounts as regards to the medication's impact (especially its adverse impact) may be interpreted in various, not necessarily mutually exclusive, ways. Behavioural changes which could be perceived only in a biological context as the adverse effect of medication (increased weight, drowsiness) are interpreted psychologically and change under this influence. Other changes, which could be seen as "purely" psychological, such as the dynamics of the separation-individuation process and the dynamically changing relationship between the patient and her mother depend, perhaps, on the biological transformations caused by the pharmacotherapy-related changes in brain functions.

What is transparent in the case discussed here is the mutual replaceability of medication-relation-medication. Once the patient stopped taking quetiapine, she turned emotionally to her mother. She herself was clearly aware of this situation and even gave it a name by jokingly calling her mother by the name as the drug. In the first situation described here, we can see that the 'objective' adverse impact might have a clearly subjective dimension and may be interpreted psychodynamically. Putting on weight is a frequent adverse reaction to second generation antipsychotic drugs, including quetiapine [30]. It seems, however, that in the case of this particular patient putting on weight can probably be attributed to two simultaneously occurring sources, and could be partly modified by verbal interpretation. Some of this impact resulted from the emotional situation of the patient (feeling lonely, empty inside, emotionally "hungry") and the interpretation of this situation changed the intensity of the related behaviour i.e. after the interpretation, the excessive appetite and weight gain were controlled for some time (in spite of her taking the same medication in the same dosage). The patient did, however, activate her psychological and behavioural mechanisms, including hyperactivity (manic defence) and a stronger perception of negative emotions.

In the second situation described in this paper, we can consider an opposite direction of interpretation i.e. the relationship of psycholog-

ical behaviour to biological factors. Since the very beginning of their usage, to begin with in surgery, neuroleptics were to cause, first of all, the effect of being unresponsive to stimuli [31]. One of the first ever descriptions of the sensory isolation (effet d'isolement sensoriel) resulting from taking neuroleptics is attributed to the ground-breaking observations by Laborit, who used promethazine and chlorpromazine. He reported that his patients become semi-conscious and that the medication "may produce a veritable medicinal lobotomy" [31]. What is essential is that contemporary neurobiological research, although its conceptualisation is different to the observations made by Laborit, Delay and Deniker, also notes the analogous impact of antipsychotic medication. The latest hypothesis is that the dopaminergic mesolimbic system is involved in physiological brain activity and it mediates the detection of new, significant stimuli in the environment. In psychosis, the hyperactivity of this system is related to attributing more salient meanings to external stimuli and internal representations. Whereas the treatment with neuroleptics and second generation antipsychotics is linked with the effect of dampening the process of aberrant salience attribution through the antidopaminergic impact. [32].

If these facts were to be taken into account as the basis of our reasoning, it could be assumed that after the patient stopped taking quetiapine she subjectively, to put it in non-scientific language, "felt the reality surrounding her in a much stronger way". Perhaps the sensitization process was also taking place for a while. The discontinuation of the use of the drug not only made the patient capable of attributing meanings and perceiving new stimuli in a "correct", balanced way. It is also likely that the rebound attributions of meaning were on the increase. The patient started having stronger responses to the stimuli from the surrounding environment, which caused her to feel threatened and in need of new sources of security. Her mother was the source of "feeling safe" for her, so she went back to living with her, and she continually needed her mother's presence. At that time, her mother was used by her to create an "anti-stimulus defence". Understood in this way, the psychological and developmental processes which took place after the patient gave up the medication

were to a large degree conditioned by the withdrawal of quetiapine from the treatment.

Such interpretations of the way the patient felt and behaved during the treatment determined the therapeutic decisions. In the first situation it was recommended that the quetiapine treatment was maintained. The alternative decision to change the medication to another drug could be the consequence of attributing the weight gain and drowsiness to quetiapine. Whether the decision was right or not is open to discussion. Finally the patient stopped taking the medication, although she started complaining of appetite dysfunctions and periodic drowsiness (the difficulty for the patient was that she could not attribute the drowsiness to the drug any more). In the second situation, the therapist discussed in detail the psychological processes taking place and their relation to the discontinuation of pharmacotherapy. At the time, the patient positively refused any further pharmacotherapy.

CONCLUSIONS

The practical application of pharmacotherapy has many dimensions, such as the biological, psychological, social, cultural and economic. In many cases, taking psychodynamic factors into consideration may contribute to a more effective way of using medication in the treatment of mental disorders. This type of psychodynamic psychopharmacotherapy may provide assistance in the choice of optimal strategies in various clinical situations. It may contribute to an adequate interpretation of the processes which take place during treatment and in the choice of psychotherapeutic or pharmacological interventions, depending on the patient's needs.

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