



CLINICAL PERSPECTIVES

CLINICAL ROUNDS IN CHILD AND ADOLESCENT MENTAL HEALTH

Mind over PMDD: A Glimpse into the Process of Pharmacotherapy-Psychotherapy Combination Treatment

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Abstract

The practice of combining pharmacotherapy with psychotherapy is advocated for as treatment of choice for many psychiatric disorders. Despite an abundance of outcome studies addressing this subject, little has been written about the process of combined treatment, leaving clinicians with insufficient guidance as to the “how” of the medication-psychotherapy merger. This case report follows the treatment course of a fourteen-year-old young woman initially diagnosed with Premenstrual Dysphoric Disorder (PMDD) and provisional Generalized Anxiety Disorder (GAD). It demonstrates the benefits, drawbacks, possible pitfalls and successful outcome of combined therapy, an outcome which may not have been achieved had only one of the modalities been used.

Key Words: *premenstrual dysphoric disorder, anxiety, adolescence, pharmacotherapy, cognitive behavioral therapy, psychotherapy-pharmacotherapy combination.*

Résumé

La pratique de combiner pharmacothérapie et psychothérapie est revendiquée comme traitement de choix de nombreux troubles psychiatriques. Malgré une abondance d'études sur les résultats traitant de ce sujet, peu de choses ont été écrites sur le processus du traitement combiné, laissant les cliniciens sans directives suffisantes sur le « comment » de la fusion médication-psychothérapie. Cette étude de cas suit le cours du traitement d'une jeune femme de 14 ans ayant reçu un diagnostic initial de trouble dysphorique prémenstruel (TDPM) et de trouble d'anxiété généralisée (TAG) provisoire. L'étude démontre les avantages, les inconvénients, les pièges possibles et le résultat réussi de la thérapie combinée, résultat qui n'aurait peut-être pas été atteint si une seule des modalités avait été utilisée.

Mots clés : *trouble dysphorique prémenstruel, anxiété, adolescence, pharmacothérapie, thérapie cognitivo-comportementale, combinaison psychothérapie-pharmacothérapie.*

Introduction

Pharmacotherapy is rapidly increasing in popularity and with it, psychotherapy-pharmacotherapy combinations. Untangling the different components of combined treatment can prove to be a difficult task. Only one Randomized Controlled Trial was published on a combined psychotherapy-pharmacotherapy treatment for women with

PMDD (Hunter et al., 2002). Regarding anxiety treatment, the literature attempts to approach this question at several levels of methodological rigor, from small studies to meta-analyses. The most common question asked is ‘which of the modalities is most effective or efficacious: psychotherapy, pharmacotherapy or the combination?’ (Crits-Christoph et al., 2011; Pull, 2007; Van Apeldoorn et al., 2008; Zwanzger, Diemer & Jabs, 2009). Another question raised, but

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less often answered, is ‘what are the mechanisms of change in successful combined treatment?’ (Arch & Craske, 2007; Powers, Smits, Whitley, Bystritsky & Telch 2008; Westra & Stewart, 1998). The answer to the first question remains inconclusive; the answer to the second remains pending, perhaps because it is so difficult to answer with current tools available to us through research.

The individual patient may get lost in meta-analyses, their distinct voice stumped by the suggestive power of questionnaires. To the same effect, subtle therapeutic considerations differ from one case of combined treatment to the other. In this sense, case reports are an essential complement to large outcome studies. We are hopeful the reader will find the following case report thought provoking and suggestive of answers still pending.

Case Background Information

Mary was fourteen years old at the time of assessment. She attended grade nine in a class for gifted children at the time. She lived with her parents, Fran and John, who were both academics, and her seventeen-year-old sister, Lisa. She had a 21-year-old half-brother, David, who was away at university. She was referred to our anxiety disorders clinic for “panic attacks” that could last up to one week.

Mary’s episodes of heightened anxiety started in grade seven. At the time of assessment, they were occurring every one-to-two months and lasting three-to-seven days. During the episodes she became more self-critical, indecisive and anxious about school. In contrast to her usual thoughtful self, her parents found it difficult to “talk her out of” negative cognitive patterns during her episodes. She experienced somatic symptoms such as palpitations and muscle tension and had difficulty enjoying herself. Anxiety and tension predominated over depressive symptoms. The episodes seemed to begin and end spontaneously, with no identified triggers, and coincided with Mary’s menstrual cycle. Her mother also reported premenstrual exacerbations of her own mood symptoms.

Other than these episodes, Mary was described as a well-adjusted young woman. Her parents described her as high-achieving and positive. She was mildly socially inhibited at baseline, described as an “over-thinker” and “worrier”, felt awkward in large groups, but had a small group of close female friends. Her development and physical health were normal. She had mild anxiety about sleepovers as a child, without any avoidance. She was consistently an A-student. Her parents were supportive, and were open about their own mental health issues.

Mary had an extensive family psychiatric history. Her parents were both being treated for anxiety and depression with Serotonin Specific Reuptake Inhibitor (SSRI) antidepressants, which they found effective. Her mother, Fran, started psychodynamic psychotherapy in the past, but did

not find it helpful and stopped after three months. Mental health issues interfered with both parents’ lives and career achievements. Mary’s maternal grandfather entered a severe depression after retiring and committed suicide two months before Mary was born. After Mary’s birth, Fran suffered a postpartum depression, likely related to this untimely loss. Fran and her first partner, David’s father, separated when David was an infant. David’s father did not have contact with the family, but they later learned that he committed suicide after struggles with addiction. David also lost a girlfriend to suicide three years prior to Mary’s treatment. Fran was functioning well professionally but had never overcome her social phobia. John was able to reach high intellectual achievements, including originating a very successful patent. His anxiety prevented him from marketing his patent and working regularly. Although attributing decrease in his anxiety to successful pharmacotherapy, he was unemployed at the time and the profit for his patent was reaped by others.

Mary’s diagnosis was not straight forward; on the one hand, her tendencies to “over-think”, her default into worry and excessive anxiety over a period of years, associated with difficulty concentrating, muscle tension and restlessness, suggested the diagnosis of Generalized Anxiety Disorder (GAD). On the other hand, her periods repeatedly coincided with the final days of severe anxiety episodes, which seemed to occur autonomously without apparent environmental triggers. Marked anxiety, tension, self-deprecating thoughts, decreased interest in usual activities, difficulty concentrating and a dramatic sense of being overwhelmed and out of control during these periods suggested the diagnosis of PMDD. We decided to diagnose Mary with PMDD due to the clear temporal description of symptoms by both Mary and her parents, leaving the diagnosis of GAD provisional.

Intervention

We provided education about different treatment options for PMDD and GAD, including psychotherapy and pharmacotherapy. A strong family load, parents’ own experience of positive therapeutic response to antidepressants and the correlation of Mary’s anxiety episodes with her menstrual cycle, led Mary and her family to view her symptoms as biologically driven. As tempting as it was for family and therapists alike to treat Mary’s anxiety with medication alone, we continued not to neglect thought patterns, potential psychosocial triggers or exacerbating factors and decided to treat Mary with a combination of Cognitive Behavioral Therapy (CBT) and fluoxetine. Considering dosage, studies show optimal receptor occupancy in low doses (Meyer et al., 2004) and so we adhered to the “start low and go slow” motto of pharmacotherapy in children and adolescents with an initial dosage of 1mg fluoxetine, which was gradually increased to 10 mg, at which stage Mary felt symptomatic

relief and dosage was maintained. Mary reported no side effects to medication, which may be attributed to slow dose increase and overall low doses. The optimal timing of pharmacological treatment for PMDD (i.e., intermittent or continuous) was a concern as well. We decided to give Mary continuous treatment, which would not focus attention on anxiety episodes and enable an uninterrupted therapeutic process. SSRI efficacy for PMDD is not significantly different whether taken in the luteal phase only or continuously (Marjoribanks et al., 2013). Mary was treated by CN, who was a resident in psychiatry at the time, for a 16-session psychotherapy course. Although the CBT provided was not a PMDD-specific intervention, it did include all components considered essential for the treatment of PMDD as described by Hunter et al., 2002. GAN provided supervision and continued to provide medication follow up and booster CBT sessions every two-to-three months for two years following treatment.

Mary was eager and motivated in therapy. We used the structure of Phillip Kendall's "Cat Project" (Kendall, 2002) to teach the CBT model and work through "FEAR plans". The main focus was coping with her episodes of increased anxiety. Techniques included identifying emotions, thought records, generating coping thoughts, problem-solving and relaxation strategies. Separate parent meetings with clear boundaries, in addition to regular therapy sessions with our adolescent patient, are integrated into our program and enabled us continuous communication with Mary and her parents alike.

Mary had difficulty applying these skills during weeks of intense anxiety but with practice, she became more confident in her ability to do so. Therapy sessions during her exacerbations were particularly informative and we applied CBT skills to anxiety exhibited in session. It was also important to attend to the pressure she felt to perform in session and please her therapist. This was an opportunity to explore her high expectations and perfectionism. Mary applied her CBT skills to some areas in her life outside premenstrual episodes and formed a hierarchy of exposures, especially regarding perfectionism in her schoolwork and social situations.

In the second half of therapy, we identified some of Mary's recurrent "thinking traps", in particular "fortune teller", "mind reader", "perfectionism" and "should thinking". Her "should thinking" often was directed towards her anxiety, for example: "I shouldn't be so stressed", "I should be able to handle this better". As Mary became aware of her meta-worry she was better able to accept her episodes of negative emotion. We discussed the idea of partial success, and reinforced that she could use her skills well, even if they did not work perfectly. We began to think more about the core and intermediate beliefs that were contributing to these patterns. Mary's family had an open and accepting attitude towards mental illness. As a result, Mary did not react to her

challenges with shame or denial, but rather was expressive and motivated. On the other hand, the family's unfortunate experiences with suicide contributed to Mary's fear of losing control over her anxiety. Mary viewed herself as very capable, but also physiologically vulnerable with a family history that seemed out of her control. This reflected her experience of her parents, as she viewed them with positive regard, but also witnessed their struggles with depression and anxiety. Thus, the narratives within her family influenced Mary's core beliefs about herself and consequently her symptoms. We narrowed down her core belief to "I always have to be at my best to make up for my biological vulnerability". Her high expectations of herself proved helpful at times, until she could no longer bear the tension and broke down with weeklong "panic attacks".

An interesting conceptual issue was the tension between psychopharmacological and psychological patient formulations and therapeutic approaches. Flexibility is required to combine these models and arrive at a bio-psychosocial understanding of the patient. We needed to consider the patient and family's ability to integrate these two perspectives in order to communicate effectively with them. This case involved a thoughtful teenager and family who could engage at a high level of sophistication, which proved helpful. Mary felt medication alleviated and "took the edge off" of her anxiety, she and her family felt they needed the support of medication. Our primary concern was the use of medication as safety behavior, i.e., the patient attributing non-occurrence of anxiety symptoms during exposure to medication rather than to habituation and mastery of anxiety provoking situations, turning medication into a subtle avoidance strategy. We had an open discussion about this with Mary and her parents. We suggested for Mary to document her anxiety episodes, menstrual cycle, and possible triggers in a calendar and continued treatment with combined CBT and medication.

We continued to view this case as a careful balance between the pharmacological treatment of a disorder which is primarily hormonal in nature, PMDD, and psychotherapy until Mary brought in the calendar in which she had marked down, very diligently, all her anxiety episodes as well as her menstrual cycle – there was no correlation. She and her parents announced proudly, reflecting their newly acquired CBT skills, that the correlation was a belief, not a biological fact. Our working diagnosis of PMDD was no longer valid. Our initial provisional diagnosis of GAD which now seemed more accurate, was now in remission. Mary was gradually tapered off medication and felt confident in her ability to cope. She had the experience of many anxiety-provoking situations she had exposed herself to and found them to be no longer difficult, including not being at her best. In the final follow up session, Mary still acknowledged her anxious tendencies, her habit of "over-thinking" and her sensitivity to other people's response, but she now knew what to do with these aspects of herself, learned to

like them and see them in a positive light. GAN continued to follow her a year after the discontinuation of medication and she remained stable. Her parents acknowledged that they had learned and changed themselves through their daughter's therapy and wished it were there to help them and their ancestors as well.

Discussion

The case prompted us to review the literature regarding PMDD as well as literature regarding the combination of psychotherapy and pharmacotherapy.

PMDD

While much of the literature focuses on hormonal and neurobiological causes of PMDD, there has been increasing interest in the interplay of genetics, personality and the development of symptoms. With respect to treatment, the best evidence supports continuous or intermittent dosing of serotonergic antidepressants in the adult population (Marjoribanks et al., 2013). Cognitive Behavioural Therapy is the best-studied psychological treatment but the evidence is limited by small sample sizes, variable methodologies and results (Lustyk, Gerrish, Shaver & Keys, 2009; Busse et al., 2009). Interestingly, one meta-analysis (Kleinstaubler, Witthof & Hiller, 2012) states "for both cognitive-behavioral interventions and serotonergic antidepressants efficacy in treatment of PMS was found not to be satisfactory. Future research should possibly focus more on a combination of both approaches". In our case, factors that contributed to our choice of treatment included patient and family preference, diagnostic uncertainty and the desire to use medications conservatively, especially with young patients. The most poignant lesson regarding PMDD was the realization that, although both our patient and her parents were certain that a direct correlation existed between symptoms and menstruation, careful monitoring proved this notion false, the diagnosis of GAD to be the accurate diagnosis and emphasized the importance of maintaining Criterion D (prospective daily ratings for at least two consecutive months) of the PMDD diagnosis for clinical, not only research purposes.

Combining psychotherapy and pharmacotherapy

Evidence as to whether combining treatments is advantageous compared to monotherapy is inconclusive for many anxiety disorders (Westra & Stewart, 1998), although somewhat stronger in the child and adolescent population (Ginsburg et al., 2011). We found several reviews suggesting going back to the individual for answers. Zwanzger, Diemer & Jabs (2009) stated "although available data on this complex issue are still insufficient, some clinical recommendations might be given...we propose that this practice needs to be

supported by a research program that aims at disentangling the differential indications of the existing treatment options by taking into account patients characteristics". Westra & Stewart (1998) highlighted the role of self-efficacy and cognitive change as the common factors in successful combination treatment as opposed to reduction in heightened somatic arousal. They concluded: "investigation of individual differences in relative responsiveness to various anxiety treatments may yield important information facilitating the determination of the most suitable treatment regime."

We found this case especially interesting and worthy of publication due to the numerous ostensibly 'biological' elements of its initial presentation and the dilemma it raised in treating a developing adolescent. If we had treated Mary with medication alone, we would not have reached Mary's core beliefs, would not have generated a sense of self-efficacy and change in thought pattern and the ability to cope without medication. These competencies are especially important considering Mary's young age and future life trajectory. If we would have stressed psychotherapy without medication, we may have lost the family's trust and the treatment alliance may have been ruptured. Medication may have alleviated anxiety just enough to enable productive therapeutic work as well. Combining psychotherapy and pharmacotherapy was an optimal choice and the knowledge of possible interactions (especially the use of medication as safety behavior) was essential in guiding us through the treatment process.

Mary's father, John, commented towards the end of treatment that he wished he had undergone this type of therapy as a child. This comment highlighted the importance of combining psychotherapy with pharmacotherapy, especially at a young age when life trajectory can still be diverted. We are hopeful this case report may encourage others to conduct studies in combined psychotherapy-pharmacotherapy that would examine the *process* of combined treatment as well as such long-term outcomes as cognitive attributions regarding anxiety, self-efficacy and level of functioning.

Acknowledgements/Conflicts of Interest

The authors have no disclosures to report. All patient identifying information has been changed. A written informed consent for the publication of this manuscript has been obtained from the patient and her parents.

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