



## Comorbid Dysmorphic Disorder Persists after Successful Electroconvulsive Treatment for Depression

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### Abstract:

Electroconvulsive therapy (ECT) is the most effective treatment of severe depressive conditions. In many countries ECT is a last resort treatment. Comorbidities with other mental illnesses are common. We describe a case of unsuccessful treatment with medication and psychotherapy over more than four years in a patient with comorbid body dysmorphic disorder (BDD) and depressive personality traits. Seven sessions of ECT relieved her depression but did not influence her body dysmorphic ideas. Relieving the depression may be a road to better treatment of BDD.

**Key words:** Body Dysmorphic Disorder, Depression, Electroconvulsive Therapy, Personality, Psychotherapy.

### Introduction

Electroconvulsive treatment (ECT) is an effective and rapid treatment of severe unipolar and bipolar depression [1]. Choosing the right patients for this treatment is often straightforward as the severity of mood depression and functional reduction is alarming. Whether comorbidities disrupt the effect of ECT is still disputed. The first publications on the effect of this treatment indicate that the effect in schizophrenic patients probably was an effect on the comorbidity depression [2]. Restrictions on the use of ECT differ from country to country and in Norway patients are required to have tried two different antidepressant medications without success before ECT is regarded as indicated. Other diagnostic indications for ECT are in use as documented in a

former study [3]. In a review of ECT in persons with a personality disorder Rasmussen concludes: "There is reasonably robust evidence that patients with borderline personality disorder experience lesser antidepressant responses to ECT acutely and higher post-ECT relapse rates than depressed patients with other or no personality disorders" [4]. Patients with dependent personality disorder may become attached to the maintenance ECT as it strengthens the sick, dependent role. The paranoid may not be willing to sign the written consent to ECT. A case report of a suicidal patient with comorbid bipolar I disorder and histrionic personality disorder shows the successful use of ECT [5]. She had been treated for two years with mood stabilizers, antipsychotics

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and benzodiazepines but developed strong suicidal ideation. This ideation disappeared after the first session with ECT and she received another seven sessions to stabilize her condition. In a population-based study of all patients given ECT in eight Swedish hospitals over a period of three years Nordenskjöld *et al.* found a 80.1% short term responder rate [6]. The responder rate was somewhat lower both for patients with comorbid personality disorder, 66.2%, and for outpatients, 66.3%.

Body dysmorphic disorder (BDD) may be a trait in patients undergoing ECT for major depression [7]. Rapinesi *et al.* showed that a 24 years old patient with major depression and body dysmorphic disorder improved significantly after six ECT sessions, i.e. the depression ended and the body dysmorphic vanished. We here describe a patient of the same age with BDD and depressive personality traits who was refractory to antidepressants and psychotherapy for more than four years.

Case Report

A woman of 24 years consulted a private psychiatrist after referral from her GP. Her mother and father divorced when she was 11 years. She had a difficult relationship with her father who never stopped criticising her in almost every aspect of life. From the age of 19 she developed a pattern of behaviour and symptoms including long periods with depression, unstoppable crying during the day, and distorted view of her body, especially the hip and thigh region. She is a successful student finishing her bachelor degree, but not realizing this fact and communicating pessimistic thoughts about her own achievements and the purpose of study.

Several series of cognitive therapy sessions with different psychologists and antidepressant medication from her GP did not alter her state. She notes that dynamic oriented therapy worsened her

condition. Her mood was dominated by gloominess, cheerlessness, joylessness, unhappiness, and she felt worthless, blaming herself for not exercising enough to reduce weight and gave a negativistic, critical, and judgmental impression to her therapist. Her score on Beck depression inventory was 40 indicating a severe depression without psychotic features. After half a year with almost weekly therapy sessions a tentative conclusion was made describing her condition as one of body dysmorphic disorder and several traits of a depressive personality disorder interpreted as recurrent depressive episodes by former therapists. A logical step after such a long period without successful treatments was to introduce the idea of electroconvulsive therapy. She discussed this with her family and consented.

The ECT treatment sessions were performed in a non-resident setting. The patient gave her written consent to the treatment series. A Symatron IV device was used (Somatics LLC, Lake Bluff, USA). Electrode placement was right unilateral (RUL) and treatments were given on alternate days. The program selected was low 0.5 charge rate. The main registration results are given in table 1. She had no first treatment euphoria and the improvement came gradually through the treatment period. The improvement was strong for the depressive symptoms, but the bodily complaints continued.

Table 1: Summary of right unilateral ECT given to patient

	Stimul- ation %	Seizure- length observed	Seizure- length registered	Post-ictal suppression index	Pentothal dose	Curacit dose
ECT 1	15	34 sec	37 sec	4.3%	500 mg	30 mg
ECT 2	15	40 sec	46 sec	80.9%	500 mg	40 mg
ECT 3	15	44 sec	63 sec	94.8%	450 mg	40 mg
ECT 4	10	45 sec	65 sec	77.2%	475 mg	40 mg
ECT 5	10	22 sec	24 sec	60.0%	500 mg	40 mg
ECT 6	15	32 sec	42 sec	89.7%	450 mg	40 mg
ECT 7	15	32 sec	45 sec	66.9%	400 mg	40 mg

Premedication with the anticholinergic glycopyrron 0.2 mg was given every time.

## Discussion

Electroconvulsive treatment of depression is a well-established and tolerated treatment modality in several forms of depressive traits, as post-partum depression, imminent suicide ideation and bipolar depression [8]. Patients often present with comorbidities that complicate the use of ECT. The success rate of ECT in the presence of comorbid disorders is reduced as shown for some comorbid personality disorders by Rasmussen [4]. Whether the improvement in depressive symptoms is followed by reduction in personality disorder related traits is not well understood. The present case experienced a reduction in depressive symptoms but not in the body dysmorphic ideas. There are conditions that interfere with ECT [9]. Among them are recent myocardial infarction, cerebrovascular injury. Character pathology as personality disorders, alcoholism and drug dependence may impede successful outcome with ECT, but are no absolute contraindication. The ability of the patient to cooperate during the treatment sessions is a prerequisite of success, as the clinical experience of the author has shown. Pascal *et al.* recommends in their book on ECT practice that patients with severe anxiety, dissociative disorder and impulse control disorder should not get ECT [10]. In the case reported by Rapinesi *et al.* the body dysmorphic symptoms of the patient were reduced after ECT [7]. Our patient got, before the ECT sessions, the treatment of choice for BDD, albeit without any success [11]. Thus the interaction of effects between depression and the comorbidities is not settled. Even in the comprehensive book by Swartz the relation of depressive disorders to personality, dissociative and body dysmorphic disorder are barely covered [12]. It is tempting to argue that personality traits may be the primary reason for the development of a depression in need of ECT, and that such patients would not profit much from ECT. On the other hand patients with a personality disorder may develop a depression in its own right, and thus

may be successfully treated for their depression through ECT. The earlier successful treatment with ECT of patients with a schizophrenia diagnosis and depressive symptoms would be an example of separate effect. The patients continue to have the schizophrenic disorder, albeit with less suffering. It has been shown that persons with Parkinson's disease and depression may be successfully treated with ECT, even with some relief of muscular tension [13]. A patient with a musculodystrophic disorder, Sandhoff disease was given relief from regular ECT session as shown in a study by Tallaksen *et al.* where the present author administered the ECT sessions [14]. Further studies are needed to guide the clinician in choosing patients for ECT even when the comorbidities are not changed. In a way we are still toiling with the same questions as in the seminal article by Gazdag concerning the treatment of schizophrenia patients with convulsive therapy.

## Conclusion

The present case indicates that severe depression may be successfully alleviated even in the presence of comorbid body dysmorphic disorder and also when the comorbid disorder is not changed. Other studies referred to in the paper show that this is the case also with other comorbid disorders as personality disorders, Parkinson's disease and Sandhoff disease.

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