

Psychiatric Case Series

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Dear Doctor,

Greetings from Micro Labs Limited.

We are happy to bring you the "PSYCHIATRY Case series", which contains the latest and most interesting cases in the field of Psychiatry.

This issue contains

1. An adolescent with mild Intellectual Disability who developed Obsessive Compulsive Disorder.
2. Intensive Exposure therapy in adolescents with severe Social Anxiety Disorder.
3. A Rare Case of Psychosis Following Sildenafil Therapy in Erectile Dysfunction.
4. Electroconvulsive Therapy in a 93-year-old patient with Major Depressive Disorder

Should you require any specific article or medical information, please feel free to contact us at medicalservices@microlabs.in

Looking forward to your valuable feedback

Best Regards,

Medical Team

1. An adolescent with mild Intellectual Disability who developed Obsessive Compulsive Disorder.

Introduction:

Obsessive Compulsive Disorder (OCD) manifests itself as obsessions, which are recurring patterns of distressing thoughts, ideas or impulses. Violence, sexual, socially taboo issues, microbiological contamination and paranoia are all common obsessions. As a result, patients respond to their obsessions with extra repetitive actions or mental acts known as compulsions.¹ Despite having appropriate understanding into these patterns, the combination of obsessions and compulsions tends to significantly affect patient's daily life. Moreover, it was shown that OCD rarely affects young children, but that symptoms usually appear in adolescence.² The difficulties of measuring obsessions with varied genetic risk factors and childhood manifestations complicates diagnosis. Mood disorders, tic disorders, attention-deficit/hyperactivity disorder (ADHD), and developmental anomalies have been identified as psychiatric comorbidities in people with OCD. During the early phases of psychological development, intellectual disability (ID) is defined by limitations in intellectual functioning and adaptive behaviour. Unfortunately, due to already reduced mental, social, and communication functions, it is difficult to diagnose mental problems in patients with ID, making it difficult to monitor behavioural changes associated with the onset of mental illness. ¹The purpose of this case study is to illustrate the significance of carefully analysing behavioural changes in people with ID, because mental symptoms in this population can present in a unique way. The clinical presentation of an adolescent with mild ID who developed OCD is described.

Obsessions and compulsions are presented in adolescents with Intellectual Disability. The symptomatology is comparable to domains typically described in people who do not have ID

Case Presentation:

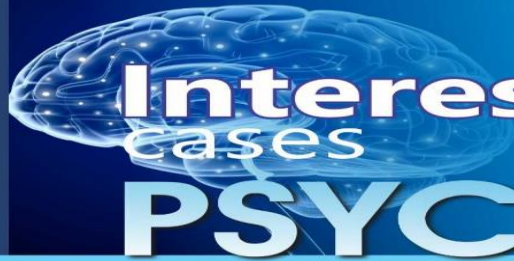
This patient is a 17-year-old adolescent in a regular grade 12 class. When the patient was in the first grade, she had difficulty understanding new concepts and functioning independently. Furthermore, the patient has suffered from significant levels of anxiety since childhood. A neuropsychologist examination was done when the patient was 16 years old. The



neuropsychological evaluation gave the impression that the patient's behaviour was consistent with mild ID. A consultant child and adolescent psychiatrist evaluated the patient in the outpatient clinic. The patient came in with her mother since she was worried about becoming quickly irritated around the family. Screaming, spitting, pulling hair, and slamming doors were some of the behaviours. This problem began when the patient was about 15 years old and has been growing and waning in severity. During the psychiatric evaluation, the patient stated that she has been having frequent disturbing thoughts about contamination, harming others, and sexual nature fears. Patient's mother said that patient would go to the restroom 20 to 30 times a day, for a total of more than two hours. During mealtimes with family, the patient has a troubling recurring thought about saliva leaking from the mouths of others around her and entering the patient's mouth. This thought was coupled with lot of anxiety and a lot of fear of infection. During these times, the patient also became anxious and irritable. The patient was born at 42 weeks of gestation, post-term, with no developmental or medical complications. However, the patient's social and emotional development was poor, and had trouble integrating with other children. The vitamin D deficiency was treated with a course of ergocalciferol 50,000 units weekly at the adolescent medicine clinic, and the patient was followed up on. Based on the DSM-5 diagnostic criteria, the psychiatric evaluation revealed a diagnosis of OCD. Sertraline 25 mg, a Selective Serotonin Re-uptake Inhibitor (SSRI), was prescribed to the patient in the morning. The medicine dose was gradually increased by 25mg every two weeks until it reached 100mg in the morning. The patient reported a 50% reduction in the severity of obsessions in the above-mentioned domains of contamination, harm, and sexual thoughts at a one-month follow-up after taking Sertraline 100 mg. At a two-month follow-up, there was a 60 % reduction in the intensity of obsessions compared to the time before starting SSRI medication. After that, the morning dose of Sertraline was increased to 150mg. The patient stated that OCD symptoms were no longer present after six weeks of continuing the 150 mg dose. Patient's ability to regulate emotion and behaviour increased as OCD symptoms improved, according to the patient's mother. The remission of OCD symptoms lasted until the most recent follow-up consultation, four months after stabilising on 150 mg of sertraline daily.

Discussion:

This article featured an adolescent with mild ID who developed OCD. Irritability was the initial source of concern, which led to a psychiatric assessment. Similarly, a recent case report detailed the presentation of an adult with moderate ID and OCD who became upset and calmed down after frequently washing his hands.³ It is worth mentioning, however, that the patient's obsessions and compulsions in the present case were consistent with typical patterns documented in earlier research that did not specifically analyse patients with ID. Although persons with ID have a high likelihood of psychiatric comorbidity, there is a tendency to underdiagnose or misdiagnose these diseases.^{1,4} The phenomenon of "diagnostic overshadowing," for example, assumes that emotional and behavioural disturbances are expected characteristics of ID.⁴ This emphasises the importance of careful and comprehensive



evaluations of any changes that have a significant impact on the functioning of people with intellectual disabilities.

Conclusion:

Obsessions and compulsions are presented in an adolescent with ID in the case presented. The symptomatology is comparable to domains typically described in people who do not have ID; nevertheless, the initial reason for this meeting was irritation. Future studies with larger sample sizes of adolescents with ID and OCD are also recommended in order to better understand the key characteristics of this population. This will almost certainly help to improve complete examinations for detecting probable comorbidity.

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2. Intensive Exposure therapy in adolescents with severe Social Anxiety Disorder.

Introduction:

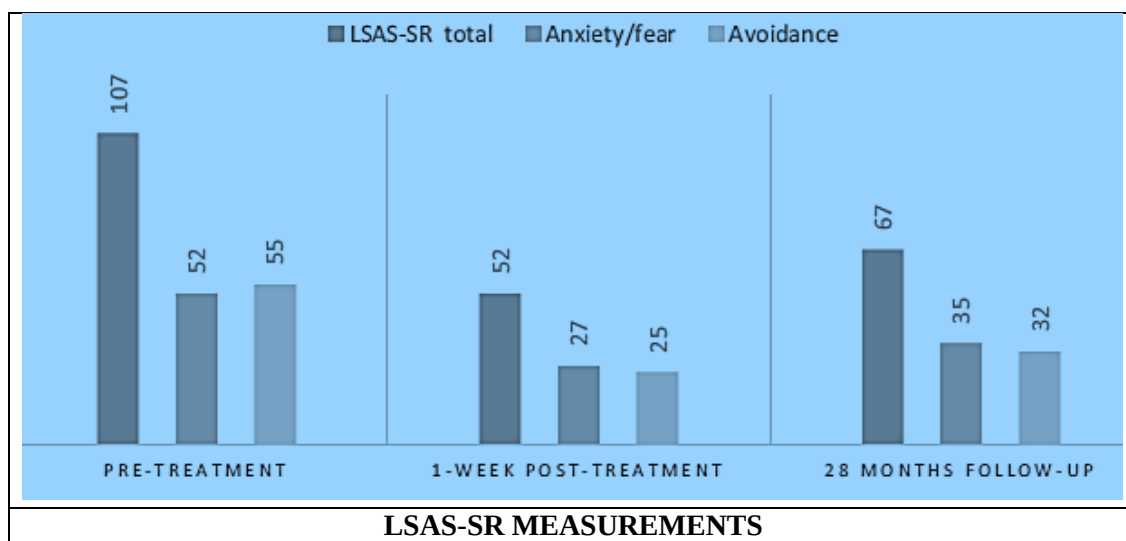
Cognitive Behavioural Therapy (CBT) has been the recommended treatment of choice for adolescents with Social Anxiety Disorder (SAD) for decades, and its effects have been proved to be long-lasting. Despite the demonstrated benefits of treatment, adolescents may find it challenging to integrate the regimen into their academic lives.¹ The "Bergen Four Day Treatment" for OCD has shown to be effective when combined with intensive exposure (IE) and response prevention (ERP) (B4DT). There are no recognised IE protocols for SAD in adolescents, to the best of the knowledge. The Bergen Four Day Treatment is an intensive protocol that uses full-day ERP for four days in a row. It was created by a Norwegian psychiatric team.¹ The patients participate in individual therapy interwoven group sessions with 5–6 people per group and a 1:1 therapist-to-patient ratio for these four days. Client satisfaction and attrition rates have been low in the B4DT programme. Studies have indicated that up to 90% of people respond to treatment. B4DT's results have demonstrated considerable improvement in not only OCD

Concentrated format of CBT combined with intensive exposure therapy for SAD, based on the B4DT, is a promising treatment option for adolescents.

symptoms, but also depressed symptoms and general anxiety.² This case study's main objective was to contribute to an unique use of intensive ERP for adolescents with severe SAD.

Case Presentation:

The patient was a healthy 16-year-old high-school student who had never received mental therapy or medication. Patient exhibited extreme anxiety, which manifested itself primarily in social circumstances and had a poor impact on academics, social life, and overall well-being. The issues were said to have worsened as a result of the student's transfer from a smaller to a larger institution. Patient described a past depressive mood that was not present at the time of examination, as well as no suicidal ideations or substance usage. The patient's aims at school were to improve her social skills and become more socially active. Overall, the patient had great motivation for therapy, however she was concerned about how treatment would affect the schoolwork. A psychiatric evaluation was performed using MINI-KID, which confirmed the DSM 5 diagnosis of SAD. In addition, the patient showed signs of general anxiety and panic disorder. For an adolescent with SAD, the treatment regimen was an adapted version of the B4DT, which included treatments from Clark and Wells' SAD protocol as well as exposure treatment. Part 1 consisted of two 1-hour psychoeducation sessions; Part 2 consisted of three days of 5-hour sessions with intensive in vivo exposure therapy; and Part 3 consisted of a follow-up session for a long-term maintenance plan as well as post-treatment assessments. A one-hour long-term follow-up session was held 28 months after the treatment. In pre-treatment assesment, a score of 59 on the children's global assessment scale (C-GAS) indicated noticeable issues visible to anyone seeing the child in a dysfunctional situation (a score of >70 indicates normal functioning/doing well). Pre-treatment ratings on the Liebowitz Social Anxiety Scale-Self Report (LSAS-SR) revealed a score of 107, indicating more severe SAD. The overall treatment period was 18 hours, including a one-hour parent education session and a one-week follow-up and booster session. Following the 3-day exposure, the patient was given a follow-up session to discuss and reflect on the achievements. Within the 3-day therapy regimen, the patient met all of her treatment objectives. The C-GAS score was 70, indicating normal functioning, and the overall LSAS-SR score was 52. At the 28-month follow-up, the patient's social status had remained mostly unaltered. The overall LSAS-SR score was reduced by 37%, indicating a satisfactory and sustainable therapy effect. The patient no longer met the criteria for any DSM 5 diagnosis, according to the clinical interview (MINI).



Discussion:

Based on an adaption of the Norwegian B4DT, this case study proposed a treatment strategy for SAD that included condensed CBT with intensive sessions and in vivo exposure therapy. The treatment was well received by the patient and took no longer than traditional therapy. According to NICE standards, a normal CBT treatment for SAD lasts between 12 and 20 hours.³ The patient was categorised as a treatment responder at the 28th month follow-up with a >28 percent reduction in LSAS-SR-scores and no longer met the criteria for SAD or any other DSM 5 diagnosis. Patient appeared to be functioning normally. This study had a long follow-up period and, like previous studies, employed the LSAS-SR-scores to evaluate the findings.^{2,4}

Conclusion:

The researchers concluded that the patient's reaction to treatment was good and consistent throughout time, and that the treatment was well received. This case study demonstrates that a concentrated format of CBT combined with intensive exposure therapy for SAD, based on the B4DT, is a promising treatment option for adolescents. The approach is best suitable for the youth as a short-term supplement to their academics and extracurricular activities.

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3. A Rare Case of Psychosis Following Sildenafil Therapy in Erectile Dysfunction.

Introduction:

The drug sildenafil citrate is often prescribed to treat erectile dysfunction (ED). It enhances the effects of nitric oxide (NO) by inhibiting phosphodiesterase type 5 (PDE5) in the corpus cavernosum, which is responsible for the breakdown of cyclic guanosine monophosphate (cGMP).^{1,2} The accumulation of intracellular cGMP causes penile smooth muscle relaxation, arteriole dilation, and increased blood flow, resulting in penile erection¹. Despite the fact that sildenafil appears to be quite efficient in the treatment of ED, there are some worries about its negative effects. Headache, skin flushing, dyspepsia and vision abnormalities are all common side effects of sildenafil. Previous trials have also observed neuropsychiatric side effects such as light-headedness, sadness, anxiety, insomnia, odd dreams, behaviour abnormalities and anxiousness.¹ However, little has been said about sildenafil-induced psychosis so far. Even in the context of a positive drug response, this major side effect has unfavourable consequences. As a result, doctors should be aware of the likelihood of this side effect. Here is a case of a patient with no known psychiatric history who experienced psychotic symptoms after starting sildenafil. this study also proposes a mechanism via which this could happen.

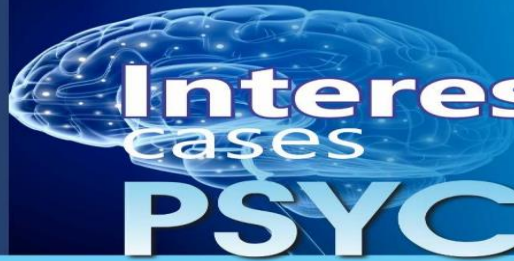
A Psychotic episode is a possible side effect of sildenafil and close monitoring is Important

Case Presentation:

A 32-year old male Patient was referred to hospital because of psychotic symptoms such as delusional jealousy, delusions of reference, and auditory hallucinations. Patient's family

had observed that the patient sometimes talked to himself and turned very angry towards them approximately a week before his referral, and the psychotic symptoms had become prominent. Patient was also suffered from sleeplessness, irritability and violent outbursts. Patient had no indications of mania or hypomania, and had no past psychotic or mood episodes. Patient had been prescribed sildenafil 50 mg as a single dose, no more than once a day, 1 hour before sexual intercourse for the past two weeks after being diagnosed with mild erectile dysfunction. The birth and early development of the child appeared to be within normal parameters. Patient was remembered by his family as an outgoing, hardworking and a responsible individual. Patient was alert and oriented to place, time, and person during a mental status





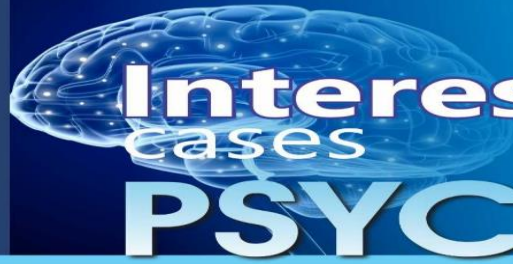
examination. physical examination was normal, including a complete neurological and genitourinary examination. All regular blood tests, including CBC, fasting blood glucose, haemoglobin A1c, lipid profile, electrolytes, renal and liver function tests, thyroid function tests, vitamin B12, folic acid, and vitamin D levels, as well as an electrocardiogram, were normal. To rule out space-occupying lesions or vascular infarcts, magnetic resonance imaging was used. The patient was admitted to the psychiatric ward due to his condition. The use of sildenafil was discontinued, and a 4 mg/day dose of risperidone was provided. Surprisingly, all of the psychotic symptoms disappeared after only one week on risperidone, and was discharged after only ten days in the hospital. A provisional diagnosis of sildenafil-induced psychotic disorder was made based on the clinical presentation, investigations and treatment outcome, according to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) criteria. The patient had no psychiatric problems one month after being discharged from the hospital, and risperidone was tapered off after two weeks. Patient was taken to the clinic by his family about 4 months later because of recurrence of identical psychotic symptoms that had occurred after taking sildenafil only once. Risperidone was restarted and gradually increased to 4 mg per day. In about two weeks, the patient had entirely recovered. No return of symptoms was found during follow-up visits during the next 12 months.

Discussion:

Medication-related neuropsychiatric side effects have long been a significant and difficult issue that has hampered patient identification and management.³ In this paper, researchers describe a psychotic episode in a subject who had no personal or family history of mental illness and was taking sildenafil. Similarly, Ozdemiroglu et al. described a patient who acquired mania while on pramipexole and then had further psychotic symptoms after taking panax ginseng and sildenafil in addition to the pramipexole treatment. Although this article suggests a link between sildenafil and psychosis, other possible causes of psychotic symptoms include concurrent drugs like ginseng and pramipexole. Furthermore, the patient had Parkinson's disease, which is linked to a higher risk of psychosis.⁴ In terms of probable mechanism, as previously stated, the pharmacological effect of sildenafil is by the inhibition of the cGMP-specific PDE5. Nitric oxide (NO) levels rise when selective PDE5 inhibits cGMP degradation. Studies suggests that NO appears to play a role in cerebrovascular illness, seizures, neurodegenerative disorders, and pain. Psychotic effects are most likely caused by sildenafil's inhibition of PDE5, accumulation of cGMP, and alterations in NO concentrations in the brain.¹

Conclusion:

In conclusion, this case illustrates a psychotic episode as a possible side effect of sildenafil and emphasises the significance of close monitoring for the occurrence of this uncommon but significant side effect. More research is needed to determine the exact mechanism behind sildenafil-induced psychosis.



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4. Electroconvulsive Therapy in a 93-year-old patient with Major Depressive Disorder

Introduction:

Electroconvulsive therapy (ECT) is a therapy that can be very successful for a variety of mental problems that don't respond well to medication or other psychosocial treatments. As the ageing society grows, depression associated with ageing becomes increasingly important.^{1,2}

The elderly are highly susceptible to drug side effects, and ECT is increasingly being used on this patient population. Cognitive adversity with ECT, on the other hand, is a major clinical problem that is usually mild and transient, but is thought to occur more commonly in older patients.¹ This case

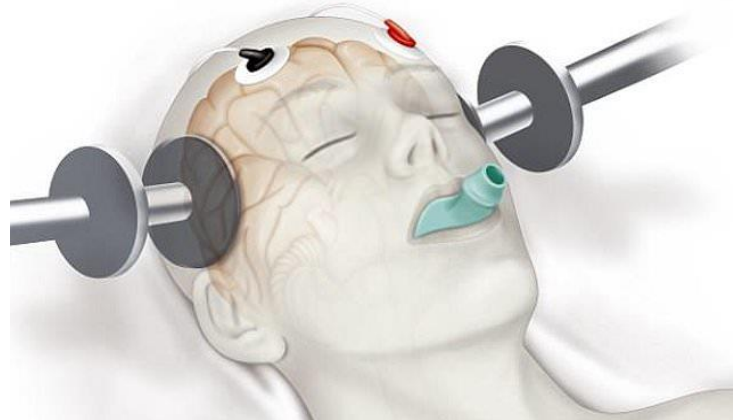
A literature search found that reports on ECT for people aged 90 and older are extremely rare. However, ECT can be a viable treatment option even for the super elderly people

describes the successful treatment of a 93-year-old woman with recurrent depression who had previously responded to ECT treatment. Researchers used ultra-brief pulse right unilateral (UBP-RUL) ECT, which resulted in a successful remission with no cognitive problems.

Case Presentation:

According to the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders, a 79-year-old right-handed woman was diagnosed with depression. Gastric ulcer, hypothyroidism, tuberculosis with ancient pleurisy and chronic heart failure were among medical history. Psychological symptoms included delusions of poverty, which were severe enough to lead to absence and self-inflicted knife wounds to the ankles. Patient was admitted for the first time, but fluvoxamine was unsuccessful, and continued to have intense suicidal thoughts. Researchers employed a Thymatron SYSTEM IV with a maximum electrical stimulus of 504 millicoulombs (100%). A bi-temporal electrode placement and a pulse width of 0.5 milliseconds were used in the first ECT course. Except for the first titration session, the stimulation dose was 15%. Over the course of two weeks, Patient was treated three times a

week for a total of six times. The Patient's depression symptoms subsided quickly, and showed no signs of cognitive impairment. Patient was discharged and continued to do well on paroxetine for the next five years. After failing to attend outpatient clinic, the patient relapsed four years later, at the age of 88, and was admitted to hospital for the second time. Paroxetine treatment resulted in drug-induced SIADH (syndrome of inappropriate secretion of antidiuretic hormone). With a pulse width of 0.5 milliseconds, ECT was given right-unilaterally. A 5% stimulation dose did not cause seizures in the initial titration session, while a 10%



stimulation level did. The stimulation level was increased to 25% in the following sessions. Over the course of two weeks, treatment was administered three times a week for a total of six times. patient's depressed symptoms healed quickly after receiving ECT, and showed no signs of cognitive impairment. Patient was discharged and put on duloxetine, which caused hyponatremia again. Antidepressants were discontinued, but Patient remained healthy and self-sufficient. At the age of 93, depression symptoms reappeared. Patient was admitted to the hospital for the third time and started vortioxetine, which resulted in hyponatremia once more. Because mirtazapine caused sedation problems, it was decided to use ECT instead. Head MRI revealed just age-related brain shrinkage with chronic ischemia alterations, with no obvious neurological problems. Patient couldn't self-feed, so fluid replacement therapy began on the first day of stay. Intravenous fluids improved dehydration and renal impairment (serum creatinine 1.5 mg/dL, blood urea nitrogen 31.4 mg/dL). An expert anesthesiologist was consulted for prospective ECT implementation due to concomitant physical problems. Researchers have decided to begin ECT with right-unilateral (RUL) electrode implantation and a pulse width of 0.25 milliseconds after consulting with an anesthesiologist and having a detailed discussion with her family about the probable risks and benefits. Thiamylal 100mg was used as an anaesthetic, suxamethonium 20mg was utilised as a muscle relaxant, and atropine 0.25mg was used as an anticholinergic. Before and after the ECT operation, supplemental oxygen was given. In the first titration session, a seizure was induced with a stimulus level of 5%. ECT treatments were started with a 30% stimulus dose, which was six times higher than the seizure threshold, from the second session onwards. In the second and third sessions, effective seizures were generated. The stimulus dose was increased to 60% after the 5th ECT since the spike-and-wave amplitude on the electroencephalogram was small and the post-ictal suppression was inadequate at the 4th ECT. ECT was administered every 2 to 3 days until the fifth session. At the end of the fifth ECT, HAM-D had improved by 14 points, and the appetite had improved as well. To reduce the risk of cognitive dysfunction, the 6th and

7th ECTs were conducted one week apart and two weeks apart, respectively. On the 66th day of the stay, Patient was discharged. As a maintenance treatment, the patient was put on oral mirtazapine.

Discussion:

While psychomotor agitation, psychomotor retardation and psychotic symptoms are all thought to be predictors of a better ECT result, age may have been given too much importance in ECT decision-making in the past. Although older age is not considered a contraindication to ECT, cognitive difficulty is a common problem with ECT in the super elderly.³ However, experts believe that studies on ECT for persons aged 90 and beyond are highly rare, and that this study is the second among Asian people to be aware of after Francis et al. (2020), which revealed therapeutic effectiveness in a 91-year-old Asian lady with late-onset bipolar mania.⁴

Conclusion:

The review of the Previous literature revealed that ECT reports for patients aged 90 and older are extremely rare. It is important to accumulate a number of effective cases. Although careful attention should be paid to real ECT procedures such as electrode placement, pulse width, stimulus dose, and treatment intervals, ECT can be an effective therapy option even for the very elderly.

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