

TREATMENT OF DEPRESSIVE AND ANXIETY DISORDERS DURING PREGNANCY AND LACTATION: A CASE STUDY

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Abstract: Introduction: Depressive and anxiety disorders are among the most common psychiatric conditions, as stated by the WHO in 2015. These disorders often manifest during adolescence or young adulthood, making it unsurprising for women in pregnancy or lactation periods to experience either a first manifestation or a recurrence of symptoms. When these disorders occur during pregnancy or lactation, antidepressant treatment may be required per established protocols. However, concerns often arise among patients, such as: “Is this medication safe for me and my baby? Could it negatively affect my baby’s development?” These hesitations can sometimes extend to healthcare providers if they lack adequate education on the topic. Therapeutic guidelines worldwide recommend psychotherapy for mild symptoms, whereas pharmacotherapy, often combined with psychotherapy, is carefully considered for moderate symptoms.

Case Report: This paper presents three case studies of pregnant women with depressive and anxiety disorders. The first case involves a patient with prenatal depression who achieved complete remission after starting antidepressant therapy. The second case highlights the recurrence of symptoms following the discontinuation of psychopharmaceuticals. The third case emphasizes the importance of individualized treatment plans and illustrates the recurrence of symptoms in a patient previously in remission.

Conclusion: Pregnant women with mental health challenges often have significant concerns about using psychopharmaceuticals during pregnancy. This paper aims to underscore that the appropriate selection and dosage of antidepressant medications can lead to remission of disorders without adverse effects on either the mother or child.

Keywords: Depression, anxiety, pregnancy, lactation, pharmacotherapy.

INTRODUCTION

Symptoms of depressive and anxiety disorders are increasingly prevalent worldwide, reaching near-epidemic proportions. This is particularly evident in the current global context, marked by pandemics, natural disasters, and conflicts. These disorders typically manifest during adolescence and young adulthood, with women being twice as likely to experience depression and anxiety as men, according to WHO epidemiological data (1, 2, 3). Unsurprisingly, pregnancy—a period of significant hormonal and life changes—often brings about either the first manifestation or a recurrence of depressive and anxiety disorders (2, 3, 4). Even in planned pregnancies, factors such as financial insecurity, inadequate living conditions, and lack of support from partners or family can exacerbate vulnerabilities and transform manageable challenges into seemingly insurmountable problems.

Treating depression and anxiety during pregnancy and lactation is a complex task for both psychiatrists and patients. Evidence suggests that depressive and anxiety disorders are more likely to recur during this critical period, particularly in individuals with a prior history of these conditions. For mild symptoms, psychotherapy is typically the first-line treatment. However, pharmacotherapy is warranted when symptoms are more severe or debilitating.

Selective serotonin reuptake inhibitors (SSRIs) are the most commonly prescribed antidepressants during pregnancy (5). While SSRIs and other medications carry potential adverse effects—such as a slightly elevated risk of preterm birth—untreated depressive and anxiety disorders pose even greater risks (6). These include an increased likelihood of pregnancy-related complications such as fetal growth restriction, higher fetal heart rate, preterm birth (before 37 weeks), and

low birth weight (under 2500 g). Additionally, untreated maternal depression is associated with neurodevelopmental challenges in children, including cognitive delays, emotional and behavioral problems, intellectual disabilities, and language impairments. Long-term consequences may include antisocial or violent behaviors during adolescence (7).

Women with a history of depression or anxiety are at heightened risk of exacerbations during the peripartum period.

This study presents three case reports to address concerns surrounding the use of pharmacotherapy during pregnancy and lactation in patients with depressive or anxiety disorders. These cases highlight the efficacy and safety of psychopharmaceuticals in managing such conditions during this critical period in patients' lives.

CASE 1

Patient, age 33, employed, married, pregnant, no children. Positive heredity, grandmother committed suicide. The patient lives with her husband and his mother in a small village. Before pregnancy, she did not have any symptoms of mental disorders. When she got pregnant, the patient was thrilled, but in the next few weeks she started to feel exhausted, she could not sleep or eat, smoked a lot, and felt anxious and unhappy. Her husband and mother-in-law thought that she felt nervous because of the pregnancy. The patient did not want to visit a psychiatrist, as she had heard that medicaments could be dangerous for the baby. In the last six weeks before her due date, the patient developed hypertension, and preeclampsia was diagnosed. She was admitted to the hospital, and a Cesarean section was performed in the 36th week of her pregnancy. She gave birth to a baby boy, but because of low-grade pulmonary hypertension, the baby was treated in the hospital for the next five weeks. After the delivery, the patient felt deeply depressed, she cried constantly, struggled to feel love for the baby, and experienced overwhelming guilt due to this emotional disconnect. She was at high risk for suicide, having developed a detailed plan, and believing that children should not be a part of this world. The patient also did not eat or sleep. When the psychiatrist visited her in the hospital, a diagnosis of serious depression was made. Sertraline and mirtazapine were prescribed, while the patient was admitted to the psychiatric clinic. During the first week, the patient became less tense, she could sleep much better, lactation was stopped, and afterward, suicidal ideas were gone. In the next four weeks, symptoms of depression became mild and the patient was dismissed from the hospital.

Recovery continued and in the following weeks the patient attained full remission.

During the year following her hospitalization, regular psychiatric check-ups were conducted, and remission persisted, with both mother and child remaining in good condition.

CASE 2

Patient, age 39, married, employed, first pregnancy. She visited a psychiatrist for several years and was treated for depression and anxiety. The patient finished her studies and found a job. She continued with regular psychiatric check-ups and had no symptoms of mental disorders. Over time, her psychopharmaceutical dosages were gradually reduced. For the six months preceding her pregnancy, she was prescribed sertraline (100 mg/die) and clonazepam (0.5 mg/die) and had remained asymptomatic. The pregnancy was unplanned. Three weeks after discovering she was pregnant, the patient consulted her general practitioner (GP) regarding the safety of continuing her medications. The GP discontinued both sertraline and clonazepam, citing concerns about potential malformations in the fetus. Within days, the patient became tense, anxious, and unable to sleep or eat. Obsessive thoughts emerged about harming her husband, as well as unknown individuals on the street, along with irrational fears that her baby would have various physical deformities. She did not go out, had no activities planned, and cried a lot. She was examined at the psychiatric outpatient clinic where sertraline, as well as clonazepam, were prescribed, but the symptoms got worse. The patient was consumed with suicidal plans, so she was admitted to the hospital. In the next period, the patient felt depressed, would cry excessively, could not eat or sleep, and was at an extremely high risk of suicide. The doses of psychopharmaceuticals were reviewed, and antipsychotic chlorpromazine in doses of 100 mg/die was added to antidepressant sertraline (200 mg/die) and diazepam (2,5 mg/die). The next week, she got better, could eat and sleep well, her obsessions about the baby being deformed disappeared, and her mood and functioning improved. She was hospitalized for three weeks during which the fetus was carefully monitored, all parameters were well. After three weeks the patient felt good enough to be dismissed from the hospital and was willing to continue with the regular psychiatric check-ups. At demission, the patient was euthymic, relaxed, and in good condition. Till delivery sertraline was reduced to 100 mg/die, chlorpromazine was excluded and diazepam was prescribed in doses of 2,5 mg when needed in the evening. Two weeks before delivery sertraline was prescribed at 50 mg/die,

trying to avoid the syndrome of rapid discontinuation in newborns. As the patient became hypertensive a few weeks before the delivery, sectio cesarea was indicated, and a healthy baby boy was born, while the mother's health remained good. After birth, there were no symptoms of mental disorders in this patient, but in the prevention of recurrent depression, doses of sertraline were 100 mg/die. Lactation was not initiated. During the next two years the mother maintained in full remission, and the baby showed normal progress in physical and mental development.

CASE 3

The patient is 37 years old, married, and employed. In her 20s, she underwent psychiatric treatment for two years due to generalized anxiety disorder (GAD) with panic attacks. Treatment included both psychotherapy and pharmacotherapy, resulting in complete symptom resolution. During her first pregnancy, she remained in remission, and her first child, now five years old, was born without complications. Since then, she experienced a miscarriage and is now four months pregnant. From the beginning, the patient felt uncomfortable and restless. She was frightened about what would happen with her pregnancy and cried often. She found it difficult to leave the house and could only do it if her husband was by her side. She complained to her GP about experiencing anxiety, daily panic attacks, trembling, lack of sleep, and inability to eat. The patient was willing to take antidepressants since they already helped her with these kinds of symptoms in the past, but her GP prescribed her with just benzodiazepines. The patient decided to come to a psychiatrist in an urgent ambulance since she recognized that she needed professional help. As symptoms of anxiety were intense, sertraline (100 mg/die) was prescribed, and due to good effect during the previous episode, mirtazapine was also added to the combination (15 mg/die). Benzodiazepines were slowly excluded. In the next 6 weeks, her symptoms became milder and less frequent. The patient felt much better, she could sleep the whole night and function normally for the rest of her pregnancy. After three months of such therapy in combination with CBT weekly full remission was acquired.

At the beginning of the 36th week of pregnancy doses of sertraline were gradually reduced to 25 mg/die, and mirtazapine was excluded. The baby was delivered on time, and both the mother and baby boy were in good condition. After childbirth, the patient was taking 50 mg of sertraline and 3 mg of bromazepam. She decided to avoid breastfeeding, although it was permitted. Over the following six months, the pa-

tient remained in good mental health, and the baby exhibited normal physical and developmental progress.

DISCUSSION

The period of pregnancy and lactation is unique for women. While often filled with happiness, it also presents a significant risk for the recurrence of depressive or anxiety symptoms, particularly in women who experienced a primomanifestation of these disorders before pregnancy. Additionally, the likelihood of experiencing a first episode of depression or anxiety is heightened during this time.

In today's world, where an overwhelming amount of information is readily available, pregnant women—especially those facing mental health challenges—often find themselves confused and uncertain about the best course of action. Psychiatrists and patients alike face complex decisions regarding the use of psychopharmaceuticals during pregnancy and lactation. These decisions involve weighing the risks of prenatal exposure to psychotropics, potential negative effects such as teratogenicity, neonatal toxicity, and long-term behavioral changes, against the risks of untreated psychiatric disorders. The primary goal is to minimize fetal exposure while addressing the dangers posed by untreated maternal mental illness (1).

Depression during pregnancy, known as prenatal or antenatal depression, is closely linked to the term “with peripartum onset” and is often underestimated as a critical health concern. According to the American College of Obstetricians and Gynecologists, all pregnant women should undergo screening for depression at least once during pregnancy. However, depression is frequently undiagnosed, and even when identified, treatment is often refused due to concerns about the baby's health. Evidence suggests that untreated depressive disorders during pregnancy are associated with adverse outcomes, including fetal growth restriction, preterm birth, low birth weight, maternal anemia, diabetes, hypertensive disorders (such as preeclampsia), cesarean delivery, and postpartum depression. Infants born to mothers with untreated prenatal depression may display irritability, reduced activity, and developmental challenges (8).

Although some studies offer conflicting views on the role of obstetric complications in maternal depression, the consensus remains that untreated mental illness significantly increases the risk of suicidal ideation and behavior, contributing to higher maternal morbidity and mortality. It is estimated that untreated depression during pregnancy carries a 50–62% likelihood of progressing to postpartum depression and may exacerbate pre-existing psychiatric conditions. Psychi-

atric grounds for pregnancy termination are also not uncommon (9).

Case 1 exemplifies antenatal depression that culminated in a cesarean delivery and neonatal health complications. Throughout the pregnancy and postpartum period, the mother exhibited severe depressive symptoms, with intermittent psychotic manifestations that posed significant risks to both her and her newborn.

Discontinuation of antidepressants during pregnancy frequently leads to withdrawal effects, which may appear within days or weeks. These effects include mood disturbances, general somatic symptoms, insomnia, gastrointestinal discomfort, and, often, a gradual recurrence of psychiatric symptoms (3). This phenomenon is clearly demonstrated in Case 2, where medication cessation led to the rapid onset of severe psychiatric symptoms, including suicidal ideation. Following reintroduction and adjustment of psychopharmacological treatment, the patient showed significant improvement, with a marked reduction in symptoms.

Beyond depression, pregnant women are vulnerable to anxiety, post-traumatic stress disorder (PTSD), postpartum psychosis, eating disorders, and obsessive-compulsive disorder. Effective treatment of peripartum psychiatric disorders aims to alleviate symptoms while supporting family dynamics. It is essential to provide comprehensive information about treatment options, including their risks and benefits (9, 10).

Selective serotonin reuptake inhibitors (SSRIs) are among the most commonly prescribed medications during pregnancy. These medications can cross the placenta and are also transferred to the newborn through breastfeeding (11). Concerns have been raised about potential associations between SSRIs and congenital heart defects. However, numerous studies indicate that SSRI exposure during pregnancy, including the first trimester, does not carry significantly higher risks compared to pregnancies where SSRIs were discontinued (12, 13, 14). According to the FDA, SSRIs approved for use during pregnancy include fluoxetine, sertraline, paroxetine, citalopram, and escitalopram (15). Among these, paroxetine has been implicated in a higher risk of major malformations, particularly cardiac defects such as septal anomalies and right ventricular outflow tract obstruction (16).

For anxiety during pregnancy, treatment typically involves antidepressants, benzodiazepines (BZDs), Z-hypnotics, and beta-blockers. SSRIs remain the

first-line treatment, but benzodiazepines are still frequently used either alone or in combination with other therapies (15, 17). Early pregnancy exposure to benzodiazepines or Z-hypnotics has not been associated with an increased risk of stillbirth or preterm birth, but it has been linked to lower birth weight and a slightly elevated risk of congenital malformations and cardiac anomalies, especially at higher doses. Late-pregnancy use of benzodiazepines may result in floppy infant syndrome or neonatal withdrawal symptoms, ranging from hypotonia and mild sedation to apneic complications and metabolic instability (18).

Despite these potential risks, benzodiazepines can be considered when clinically indicated. To mitigate risks, non-pharmacological interventions should be prioritized for anxiety and insomnia during pregnancy. When benzodiazepines are necessary, they should be prescribed at the lowest effective dose, particularly during the early stages of pregnancy (19).

CONCLUSION

For treating these common mental disorders during pregnancy and breastfeeding, psychotherapy is the first choice, due to various therapeutical protocols (ICE, CANADIAN, South Africa, Australian, etc). However, when symptoms are moderate to severe, psychopharmaceuticals are often necessary in addition to psychotherapy.

The decision to initiate pharmacotherapy requires a careful evaluation of the risks and benefits. Emerging evidence suggests that the prevalence of fetal malformations is comparable between treated and untreated depressive patients. According to the NICE guidelines, psychotherapy is recommended for mild symptoms, while moderate to severe cases warrant a thorough discussion of pharmacological options.

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Sažetak

LEČENJE DEPRESIVNIH I ANKSIOZNIH POREMEĆAJA
TOKOM TRUDNOĆE I PERIODA LAKTACIJE: STUDIJA SLUČAJAInić Teodora,¹ Cvjetković Bošnjak Mina,^{1,2} Kuljančić Dušan^{1,2}¹ Univerzitetski Klinički centar Vojvodine, Klinika za psihijatriju, Novi Sad, Srbija² Univerzitet u Novom Sadu, Medicinski fakultet, Novi Sad, Srbija

Uvod: Depresivni i anksiozni poremećaji su najučestaliji od svih mentalnih poremećaja prema podacima SZO iz 2015. Primomanifestacija ovih poremećaja najčešće se ispoljava u adolescenciji i ranom odrasлом dobu. Neretko, simptomi se ispoljavaju tokom trudnoće ili perioda laktacije, koji predstavljaju specijalan ali i veoma vulnerabilan period u životu žene. Zabrinute zbog transplacentarnog prelaza lekova u krvotok ploda, pacijentkinje postavljaju pitanja o bezbednosti preporučenog antidepresiva. Ukoliko medicinsko osoblje nije dobro edukovano, takođe se ispoljava nedoumica o bezbednosti psihofarmaka u trudnoći. Širom sveta protokoli u lečenju preporučuju primenu psihoterapijskih intervencija ukoliko su simptomi anksioznosti ili depresivni simptomi blagi, a ukoliko su intenzivniji, terapija izbora je pažljiva kombinacija psihofarmaka i psihoterapije.

Prikaz slučaja: U ovom radu su data tri prikaza slučaja pacijentkinja koje su se tokom trudnoće suočile sa depresivnim i anksioznim poremećajima. Kod prve pacijentkinje je došlo do razvoja prenatalne depresije zbog čega su propisani antidepresivi koji su doveli do potpune remisije. Drugi prikaz slučaja objašnjava vezu između diskontinuacije psihofarmaka i ponovnog proboja simptoma mentalnog poremećaja, dok treći naglašava značaj individualizovanog tretmana pacijenata i ponovne pojave simptoma mentalnih poremećaja tokom trudnoće kod pacijentkinja koje su prethodno bile u remisiji.

Zaključak: Studija od tri slučaja je prikazana u svrhu edukacije lekara o efikasnosti i bezbednosti primene antidepresiva kod pacijentkinja u trudnoći i periodu laktacije.

Ključne reči: depresija, anksioznost, trudnoća, laktacija, psihofarmakoterapija.

REFERENCES

1. Cohen LS, Rosenbaum JF. Psychotropic drug use during pregnancy: weighing the risks. *J Clin Psychiatry*. 1998; 58(suppl 2): 18-28.
2. Besag FMC, Vasey MJ. Should antidepressants be avoided in pregnancy? *Drug Saf*. 2023; 46(1): 1-17. doi: 10.1007/s40264-022-01257-1.
3. Răchită AIC, Strete GE, Sălcudean A, Ghiga DV, Rădulescu F, Călinescu M et al. Prevalence and risk factors of depression and anxiety among women in the last trimester of pregnancy: across-sectional study. *Medicina (Kaunas)*. 2023; 59(6): 1009. doi: 10.3390/medicina59061009.
4. Bennet HA, Einarson A, Taddio A, Koren G, Einarson TR. Prevalence of depression during pregnancy: systematic review. *Obstet Gynecol*. 2004; 103(4): 698-709. doi: 10.1097/01.AOG.0000116689.75396.5f.
5. Costa B, Vale N. Advances in psychotropic treatment for pregnant women: efficacy, adverse outcomes, and therapeutic monitoring. *J Clin Med*. 2024; 13(15): 4398. doi: 10.3390/jcm13154398.
6. Einarson A, Choi J, Einarson TR, Koren G. Adverse effects of antidepressant use in pregnancy: an evaluation of fetal growth and preterm birth. *Depress Anxiety*. 2010; 27(1): 35-8. doi: 10.1002/da.20598.
7. Al-Fadel N, Alrwisan A. Antidepressant use during pregnancy and the potential risk of motor outcomes and intellectual disabilities in offspring: a systematic review. *Drugs Real World Outcomes*. 2021; 8(2): 105-23. doi:10.1007/s40801-021-00232-z.
8. Jahan N, Went TR, Sultan W, Sapkota A, Khurshid H, Qureshi IA et al. Untreated depression during pregnancy and its effect on pregnancy outcomes: a systematic review. *Cureus*. 2021; 13(8): e17251. doi: 10.7759/cureus.17251.
9. Gallitelli V, Franco R, Guidi S, Puri L, Parasiliti M, Vidiri A et al. Depression treatment in pregnancy: is it safe, or is it not? *Int J Environ Res Public Health*. 2024; 21(4): 404. doi: 10.3390/ijerph21040404.
10. Meltzer-Brody S, Howard LM, Bergink V, Vigod S, Jones I, Munk-Olsen T, et al. Postpartum psychiatric disorders. *Nat Rev Dis Primers*. 2018 Apr 26; 4: 18022. doi: 10.1038/nrdp.2018.22.
11. van der Veere CN, de Vries NKS, van Braeckel KN-JA, Bos AF. Intra-uterine exposure to selective serotonin reuptake inhibitors (SSRIs), maternal psychopathology, and neurodevelopment at age 2.5 years - Results from the prospective cohort SMOK study. *Early Hum Dev*. 2020; 147: 105075. doi: 10.1016/j.earlhumdev.2020.105075.
12. Jimenez-Solem E, Andersen JT, Petersen M, Broedbaek K, Jensen JK, Afzal S, et al. Exposure to selective serotonin reuptake inhibitors and the risk of congenital malformations: A nationwide cohort study. *BMJ Open*. 2012; 2(3): e001148. doi:10.1136/bmjopen-2012-001148.
13. Huang W, Page RL, Morris T, Ayres S, Ferdinand AO, Sinha S. Maternal exposure to SSRIs or SNRIs and the risk of congenital abnormalities in offspring: A systematic review and meta-analysis. *PLoS One*. 2023; 18(11): e0294996. doi: 10.1371/journal.pone.0294996.
14. Reis M, Källén B. Combined use of selective serotonin reuptake inhibitors and sedatives/hypnotics during pregnancy: Risk of relatively severe congenital malformations or cardi-

ac defects. A register study. *BMJ Open*. 2013; 3(2): e002166. doi:10.1136/bmjopen-2012-002166.

15. Bérard A, Iessa N, Chaabane S, Muanda FT, Boukhris T, Zhao JP. The risk of major cardiac malformations associated with paroxetine use during the first trimester of pregnancy: a systematic review and meta-analysis. *Br J Clin Pharmacol*. 2016; 81(4): 589-604. doi: 10.1111/bcp.12849.

16. Einarson A. Paroxetine use in pregnancy and increased risk of heart defects: Evaluating the evidence. *Can Fam Physician*. 2010; 56(8): 767-8. Erratum in: *Can Fam Physician*. 2010; 56(11): 1112.

17. Munger Clary HM. Caution: Benzodiazepines in pregnancy and risk of adverse perinatal outcomes. *Epilepsy Curr*. 2024; 24(2): 105-7. doi: 10.1177/15357597241227656.

18. McElhatton PR. The effects of benzodiazepine use during pregnancy and lactation. *Reprod Toxicol*. 1994; 8(6): 461-75. doi: 10.1016/0890-6238(94)90029-9.

19. Noh Y, Lee H, Choi A, Kwon JS, Choe SA, Chae J, et al. First-trimester exposure to benzodiazepines and risk of congenital malformations in offspring: A population-based cohort study in South Korea. *PLoS Med*. 2022; 19(3): e1003945. doi: 10.1371/journal.pmed.1003945.

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