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Presentación de caso

Delusion of Pregnancy in Bipolar Affective Disorder

Un acercamiento al delirio de embarazo en trastorno afectivo bipolar

José Alejandro Valdevila Figueira  ^{1,2,3}

Consuelo María Villacís Álava ^{1,4}

María Emilia Andrade Hidalgo ¹

Indira Dayana Carvajal Parra ^{1,3}

¹Instituto de Neurociencias de Guayaquil. Guayaquil, Ecuador

²Universidad Ecotec. Guayaquil, Ecuador

³Red de Investigación en Psicología y Psiquiatría (RIPYP). Ecuador.

⁴Universidad Católica de Santiago de Guayaquil, Guayaquil, Ecuador

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Abstract

Introduction: Bipolar affective disorder (F31) can show complex psychotic symptoms that worsen its clinical course, such as delusions of pregnancy. These manifestations, although uncommon, pose a diagnostic and therapeutic challenge due to their functional and social impact.

Case report: A young woman diagnosed with bipolar I affective disorder, with multiple hospitalizations due to affective and psychotic episodes. The persistent presence of delusions of pregnancy was notable, accompanied by thought disorganization, bradypsychia, and risky behaviors such as IUD removal. Assessments revealed subclinical hypothyroidism, focal EEG abnormalities, and a borderline IQ. Treatment included mood stabilizers, atypical and typical antipsychotics, and depot medications. Despite intensive management, poor therapeutic adherence and frequent relapses were evident.

Conclusion: Early recognition of somatic delusions, such as delusions of pregnancy, and a comprehensive approach are essential to prevent relapses and improve prognosis.

Keywords: bipolar affective disorder, delusions of pregnancy, pseudocyesis, affective psychopathology, therapeutic adherence.

Resumen

Introducción: el trastorno afectivo bipolar (F31) puede presentar síntomas psicóticos complejos que agravan su curso clínico, como los delirios de embarazo. Estas manifestaciones, aunque infrecuentes, suponen un reto diagnóstico y terapéutico por su impacto funcional y social.

Presentación del caso: mujer joven con diagnóstico de trastorno afectivo bipolar tipo I, con múltiples hospitalizaciones por episodios afectivos y psicóticos. Destaca la presencia persistente de delirios de embarazo, acompañados de desorganización del pensamiento, bradipsiquia, y conductas de riesgo como la retirada del DIU. Evaluaciones revelaron hipotiroidismo subclínico, alteraciones focales en EEG y un coeficiente intelectual limítrofe. El tratamiento incluyó estabilizadores del ánimo, antipsicóticos atípicos y típicos, así como medicación en depósito. A pesar del manejo intensivo, se evidenció pobre adherencia terapéutica y recaídas frecuentes.

Conclusión: el reconocimiento temprano de los delirios somáticos, como los de embarazo, y el abordaje integral son fundamentales para prevenir recaídas y mejorar el pronóstico.

Palabras clave: trastorno afectivo bipolar, delirio de embarazo, pseudociesis, psicopatología afectiva, adherencia terapéutica

Introduction

Delusion of pregnancy has been documented across diverse clinical contexts from an epidemiological perspective. In a systematic review of 84 cases, it was found that the majority involved young women diagnosed with schizophrenia or bipolar disorder. Although more common in women, it has also been reported in men, sometimes associated with gender dysphoria or hormonal imbalances.⁽¹⁾ Pseudocyesis is more often observed in regions where motherhood is considered an essential value therefore infertility carries significant emotional or social burden. Cultural factors play a crucial role in the genesis and maintenance of the condition.⁽²⁾

In the diagnostic differentiation, key elements must be considered. In pseudocyesis, physical symptoms mimicking pregnancy predominate, whereas in delirium, these signs are absent or misinterpreted. Moreover, delusion is characterized by the rigidity of belief, lack of insight, and coexistence with other psychotic symptoms. Antipsychotic treatment is fundamental in such cases, and the therapeutic response tends to be partial or fluctuating. In some patients, electroconvulsive therapy (ECT) has proven useful, although delusion symptoms may reappear quickly.⁽³⁾

Delusion of pregnancy, while not frequent, represents a complex and clinically relevant psychopathological phenomenon. In such cases, the firm conviction of being pregnant occurs in the absence of somatic signs compatible with gestation and despite multiple medical tests contradicting it, thus allowing its classification as a genuine delusion rather than pseudocyesis. This distinction is essential, since pseudocyesis involves physiological changes induced by psychogenic mechanisms, whereas delusional pregnancy belongs to the realm of psychotic disorders, with impaired reality testing as its core feature.⁽⁴⁾

The presence of this type of delusion has been reported in various mental disorders, particularly in schizophrenia and affective disorders with psychotic symptoms.⁽⁵⁾ Within bipolar disorder, the underlying diagnosis allows the delusion to be interpreted as part of a broader psychotic theme, likely influenced by cultural, affective, and identity-related factors. Symbolic aspects associated with pregnancy and motherhood (or fatherhood, in male cases) may play a significant role in determining the content of the delusion, as noted by several authors.⁽⁶⁾

From a psychodynamic perspective, delusion of pregnancy has been conceptualized as a defensive reaction against feelings of emptiness, loneliness, or loss, through the delusional construction of a “new life” within the body.⁽⁷⁾ This perspective may enrich understanding of the phenomenon when the patient’s life context and biographical background are taken into consideration. However, advances in neurobiology have identified potential cerebral

correlates, particularly in limbic and prefrontal regions, as well as alterations in dopaminergic systems, consistent with findings in other psychotic disorders.⁽⁸⁾ Regarding treatment, the literature suggests that delusions of pregnancy generally respond to conventional antipsychotic management, although partial persistence of delusional content is not uncommon, especially in chronic patients or those with poor insight.⁽⁹⁾

It is crucial to conduct a thorough medical and gynecological evaluation to rule out physical causes. Pharmacological regimens should be reviewed and optimized, favoring antipsychotics with fewer side effects and strategies to enhance adherence, and considering electroconvulsive therapy when appropriate.⁽¹⁰⁾ Psychotherapeutic interventions should focus on the cognitive restructuring of delusional beliefs and on working with the family to manage beliefs and strengthen social support. Furthermore, they must address the psychosocial and cultural factors that may perpetuate the delusion. Finally, close clinical monitoring and continuous risk assessment are required, given the potential coexistence of additional psychotic symptoms.

Case report

This clinical case illustrates the complexity and severity that bipolar affective disorder (F31) can reach, particularly when combined with specific psychotic symptoms such as delusions of pregnancy and associated neuropsychiatric comorbidity. During outpatient follow-up and multiple psychiatric hospitalizations, a recurrent pattern of decompensation was observed, marked by fluctuating phases between depressive, manic, and psychotic episodes, particularly with the surfacing of persecutory and somatic delusions related to a non-existent pregnancy.

The case involves a 39-year-old female patient with a long-standing history of mental illness. She exhibited marked psychic disorganization characterized by bradypsychia, hypoprosexia, and bradylalia, along with significant risk behaviors such as the removal of her intrauterine device (IUD) under the wrong belief of conceiving more children, and the negative influence of an elderly relative with dementia to engage in dangerous acts. This reflects severe impairment in judgment, impulse control, and functional impairment—factors that worsen treatment adherence and justify prolonged hospitalizations for clinical stabilization. Complementary examinations revealed relevant findings, including mild subclinical hypothyroidism (decreased FT4) and focal electroencephalographic alterations, suggesting potential cortical irritability contributing to the affective and psychotic symptomatology. Neurocognitive evaluations indicated a borderline intellectual quotient and slowed verbal and executive processing, which may compromise social and academic adaptation, as well as therapeutic adherence.

Somatic and pharmacological management. The patient underwent 12 sessions of electroconvulsive therapy (ECT). She was prescribed long-acting injectable risperidone 25 mg every 14 days and received trials with typical antipsychotics haloperidol and levomepromazine and atypical antipsychotics risperidone, quetiapine, and aripiprazole both as monotherapy and in combination with valproic acid. Despite therapeutic dosing and adequate trial durations, the overall response was limited, with recurrent decompensations and persistence of the pregnancy delusion.

This specific psychotic symptom (delusion of pregnancy) has acted as both a trigger and a perpetuating factor of clinical decompensation. Although uncommon, such delusions represent a complex psychiatric manifestation that generates psychosocial and family conflicts, as well as risky decisions that affect the patient's physical and mental health. Literature indicates that these delusions are associated with greater deterioration in reality testing and require specialized therapeutic interventions that address both the psychotic dimension and its psychosocial consequences.

From a functional perspective, the patient continues her university studies in Journalism but displays demotivation, irregular attendance, sleep and appetite disturbances with weight gain, and significant family conflicts. These factors reflect persistent residual affective symptoms and highlight the need for comprehensive therapeutic strategies, including psychological support, psychoeducation, management of medical comorbidities (such as weight control), and strengthening of family support systems.

Multidisciplinary follow-up is essential in such cases, as the clinical complexity demands a coordinated approach integrating pharmacotherapy, psychotherapy, neurological care, and psychosocial support. Close collaboration among primary care, neurology, psychiatry, and social services may improve adherence, reduce recurrent hospitalizations, and enhance quality of life.

In summary, this case underscores the importance of recognizing and treating specific delusions, such as delusions of pregnancy, within the spectrum of bipolar affective disorder. It further emphasizes the need for a comprehensive and sustained approach that addresses neuropsychiatric, functional, and familial aspects, with the goal of promoting clinical stability, functionality, and relapse prevention. The standard structure (CARE guidelines)⁽¹¹⁾ was used for the case report, as recommended for this type of scientific report.

Treatment consisted of 12 sessions of electroconvulsive therapy, depot risperidone 25 mg every 2 weeks, and combinations of typical neuroleptics (haloperidol and levomepromazine), atypical neuroleptics (risperidone, quetiapine, and aripiprazole), and both groups combined with valproic acid, with unfavorable results despite medium and high doses and sufficient time.

Discussion

This clinical case exemplifies the complexity of bipolar affective disorder (F31) with specific psychotic manifestations, such as delusions of pregnancy, which present both diagnostic and therapeutic challenges. The patient exhibited a fluctuating course with episodes of psychotic decompensation characterized by persecutory and somatic delusions, particularly related to a non-existent pregnancy. Although rare, this psychopathological phenomenon has been described in the literature under the terms delusion of pregnancy and pseudocyesis or false pregnancy.

Pseudocyesis is a syndrome in which the patient presents physical signs and symptoms of pregnancy without actually being pregnant, and it is frequently associated with severe psychiatric disorders such as schizophrenia, mood disorders with psychotic symptoms, or delusional disorders. In this context, the coexistence of bipolar disorder with somatic delusions related to pregnancy has been reported in several studies, indicating that such delusions can significantly complicate clinical evolution and therapeutic management.

For instance, Stoop et al.,⁽¹²⁾ describe in their review that delusions of pregnancy can manifest in affective psychotic disorders and are frequently associated with risky behaviors affecting physical and mental health, such as the manipulation of contraceptive methods — as observed in this patient, who removed her intrauterine device (IUD) in an attempt to conceive more children. These delusions have also been linked to an increased risk of violent or self-injurious behavior due to the intense distress and the disorganization of judgment they produce.⁽¹³⁾

In line with these findings, Spiridion, Tran and Sundararajan⁽¹⁴⁾ report cases of pseudocyesis in patients with affective disorders, where the delusional content of pregnancy manifests through somatic symptoms and strong beliefs that defy reality. Such cases require multidisciplinary and personalized management, integrating psychopharmacological and psychotherapeutic interventions. These authors also emphasize the importance of early detection and intervention for these symptoms to prevent serious obstetric and psychiatric complications.

The coexistence of neurophysiological alterations, such as the theta and sharp waves observed in the patient's EEG, has also been associated with focal cortical irritability and vulnerability to complex psychotic episodes. This finding suggests the need for a joint neurological–psychiatric approach to optimize treatment.⁽¹⁵⁾ This aligns with literature emphasizing the relevance of assessing neurobiological comorbidities in affective disorders with psychotic symptoms.⁽¹⁶⁾

Recurrent nonadherence to therapy, common in patients with bipolar disorder and delusions of pregnancy, contributes to the recurrence of acute episodes and prolonged hospitalizations. Treatment adherence is a key factor for stabilization and relapse prevention; therefore, the use of depot antipsychotics and psychoeducation or family support programs is recommended.

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Integration of psychosocial strategies, multidisciplinary follow-up, and early intervention are fundamental pillars for improving quality of life, functionality, and long-term prognosis — particularly in cases with complex psychotic symptomatology and cognitive comorbidity.

Conclusion

This clinical case highlights the complexity of managing bipolar affective disorder with specific psychotic symptoms, such as delusion of pregnancy, and the necessity of comprehensive therapeutic approaches. The combination of neurobiological factors, cognitive impairment, medical comorbidities, and poor treatment adherence generates a high risk of relapse and functional deterioration. Multidisciplinary follow-up, psychoeducational interventions, and optimized pharmacological treatment are essential to improving prognosis. Early recognition of such delusions enables the implementation of strategies that minimize clinical, familial, and social impact, thereby promoting long-term stability and a better quality of life for the patient.

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Conflicts of interest

The authors declare that there are no conflicts of interest related to the research presented.

Author contributions

José Alejandro Valdevila Figueira: participated in conceptualization, data curation, formal analysis, funding acquisition, investigation, methodology, project administration, resource management, software use, supervision, validation, visualization, writing – original draft, and writing – review and editing.

Consuelo María Villacis Alava: participated in conceptualization, data curation, formal analysis, investigation, methodology, validation, visualization, writing – original draft, and writing – review and editing.

María Emilia Andrade Hidalgo: participated in conceptualization, formal analysis, methodology, writing – original draft, and writing – review and editing.

Indira Dayana Carvajal Parra: participated in conceptualization, formal analysis, methodology, writing – original draft, and writing – review and editing.

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Data Availability Statement

The anonymized data supporting the findings of this study are available from the corresponding author upon reasonable request.

Ethical Considerations

This study was conducted in accordance with the ethical principles established in the Declaration of Helsinki and complied with national and institutional research ethics guidelines. Participation was voluntary, and informed consent was obtained electronically from all students prior to data collection. Participant confidentiality and anonymity were strictly maintained throughout the study.

(Annex 1)

Informed Consent

Annex 1. Informed Consent for Publication of a Clinical Case Report

I, _____, with identity card number _____, as the legal representative and mother of patient _____, freely, voluntarily, and with full information, authorize the use of clinical information contained in my daughter's medical history for the preparation, publication, and dissemination of a scientific article under the guise of a clinical case report.

I declare that I have been clearly and sufficiently informed of the following points:

1. That the clinical case will be used for scientific, academic, and educational purposes, without profit.
2. That the patient's identity will be fully protected through the use of codes, and that no personally identifiable information (such as full name, ID number, address, face, etc.) will be included in the publication.

3. That the material may be presented at medical conferences, articles in scientific journals, or academic documents, and that the information used will be strictly necessary to illustrate relevant clinical, diagnostic, and therapeutic aspects.
4. That I have the right to revoke this consent at any time before publication of the article, without affecting the medical care the patient receives.
5. I understand the minimal risks associated with the publication of clinical cases, as well as the measures that will be taken to protect the patient's privacy and confidentiality.
6. Participation in this case report does not imply financial compensation or direct benefits.

Having understood all the information provided, I give my consent for the use of clinical data for scientific and academic purposes.

Place and date: _____

Signature of mother or legal representative: _____

Full name: _____

ID: _____

Signature of treating professional or person responsible for the article:

Full name: Jose Alejandro Valdevila Figueira

Position / Specialty: Inpatient attending physician

Health institution: Guayaquil Institute of Neurosciences

Contact: 0995567382

☐ I have received a copy of this document.

Note: This consent is issued in compliance with the ethical principles of the Declaration of Helsinki and local regulations regarding privacy and the use of medical information.