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OLANZAPINE AS A FIRST LINE OF CHOICE IN POSTPARTUM PSYCHOSIS – A CASE SERIES

Psychiatry

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ABSTRACT

Postpartum psychosis is a severe, acute, mental illness of multifactorial origin showing hallucinations, delusions and disorganized thoughts. Risk factors include bipolar affect, depression, traumatic childhood, primigravida, higher daily cortisol levels, first born women, dysregulation of immune-HPA axis along with stress, use of psychoactive drugs, risk of hospital admission, lack of sleep, rapidly falling estrogen levels and environmental as well as social factors. Positive and Negative Syndrome Scale (PANSS) along with Clinical Global Impressions (CGI) were used for diagnosis and prognosis during the course of treatment. It warrants urgency since the condition poses a threat to both maternal and natal health. Timely measures ensure well-being of both the mother and the child and thus the whole family. We study 3 postpartum psychosis cases in this series, where all showed different symptoms and were treated with Olanzapine which is amongst the first line drugs of choice. All 3 showed good prognosis with marked symptomatic relief, thus strengthening the evidence of Olanzapine as a first line drug of choice in postpartum psychosis.

KEYWORDS

Postpartum psychosis, Olanzapine, PANSS, CGI, Breastfeeding

INTRODUCTION:

Postpartum psychosis is a severe form of mental illness characterized by hallucinations, delusion, and disorganized thoughts (2). It is an acute illness of multifactorial origin and is considered a psychiatric emergency. It is the abrupt onset of psychotic symptoms within two to four weeks of delivery, represented as brief psychotic disorder in DSM-5 (3,4). Bipolar affect, depression, traumatic childhood, primigravida, higher daily cortisol levels, first born women, dysregulation of the immune-HPA axis along with stress, use of psychoactive drugs, risk of hospital admission and environmental as well as social factors. (1) Lack of sleep, hormonal fluctuations, rapidly falling estrogen levels, also pose risks for development of the same (5,6). Treatment modalities include – antipsychotic medications, along with psychological counseling. This should be prescribed after a thorough assessment to avoid the repercussions of an untreated illness on one hand, and side effects of said drugs on breastfeeding on the other. Although there is an absence of adequate definitive studies, most first and second generation antipsychotics appear to pose a minimal risk to the infant (7). According to Klinger et.al, olanzapine was categorized as acceptable for breastfeeding (8). Systematic review of second generation antipsychotics suggest that olanzapine seems to be a first-line agent during breastfeeding as reported by Annual Meeting of Psychopharmacology Highlights.

CASE 1:

A 31-year-old female with no history of known mental illness was referred to the psychiatry department for complaints of new onset of disorganized behavior on post-op, day 4, after giving birth to second girl child via LSCS delivery. She appeared well-kept with a normal build and weight. She was noted smiling fearfully and laughing to herself. Her affect was labile, tearful and was found singing and dancing loudly and irritable at times. She was not taking care of the child and had to be reminded constantly to breastfeed. On inquiry, she reported fear of the devil in the ward. On examination, no motor or cognitive impairment was noted. Her blood investigations were within normal levels. She was started on Tablet Olanzapine 2.5mg once in the night. Breastfeeding under supervision and top-feeds in the night was advised after consulting the pediatrician.

CASE 2:

A 26-year-old female was referred to the psychiatry department on post-op day 2, after giving birth to second child – male, via LSCS delivery. She was noticed to have crying spells and was not taking care of the child. She had to be forced to breastfeed. On inquiry she reported suspicions towards her husband and the hospital staff saying that she had a twin girl child which was killed by the hospital staff after her husband had forced them to do so. She was sure about the same as she heard them plotting against the child in the OT. She claimed she was neither suicidal nor had thoughts of infanticide. She reported having no visual or auditory hallucinations. Her CNS examination was within normal limits. She was started on Tablet Olanzapine 1.25mg in the morning and 2.5mg at night. The baby was started on top-feeds in addition to breastfeeding after pediatric consultation.

CASE 3:

A 36-year-old female referred to the psychiatry department on day 7 of normal vaginal delivery of her 3rd female child, was reported to have new onset of disorganized behavior. She reported suspicions towards her husband and denied the child was hers, refusing to breastfeed. She reported hearing voices of the devil behind her who would kill her if she held the child. She was noticed to be fearful with a labile mood and mumbled to herself, staring at the wall. She had no visual or auditory hallucinations and was neither suicidal not had thoughts of infanticide. On examination, no motor or cognitive impairment was found, and blood investigations were within normal limits. She was started on Tablet Olanzapine 2.5mg once in the night.

DISCUSSION:

Postpartum psychosis is the severest form of mental illness characterized by extreme confusion, loss of touch with reality, paranoia, delusions, disorganized thought processes and hallucinations (5). It carries serious threat to the life of both the mother and child, and warrants emergency medical care, including hospitalization if necessary.

In the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) postpartum psychosis is categorized as a "short psychotic illness". Whereas the International Classification of Diseases 11th Revision (ICD-11) classifies postpartum psychosis as one of the syndromes associated with pregnancy or the puerperium (beginning approximately 6 weeks after delivery) that involves significant mental and behavioral characteristics, such as delusions, hallucinations, mood symptoms, including depression and/or mania or other psychotic symptoms(9).

WHO estimates approximately 64 million Disability Adjusted Life Years (DALYs) lost between 2000 to 2012 for women of age 14-49 years due to mental and behavioral disorders, the highest proportion of which occurs during key reproductive years(10). The incidence of puerperal psychosis ranged from 0.89 to 2.6 in one thousand women and prevalence of psychosis was 5 in 1000, which although relatively low, has the potential for serious consequences from a global health perspective (11).

In our study of the aforementioned 3 cases, there was no history of previous affect disorder in any patient. Personal as well as family history yielded no significant findings. Typical symptoms of disorganized behavior, delusions, paranoia, confusion, amongst others, were seen. It is interesting to note that none of the 3 cases were primigravidas – a risk factor considered in development of postpartum psychosis (12). The patients were administered Positive and Negative Syndrome Scale (PANSS)(13) for Schizophrenia along with Clinical Global Impressions (CGI)(14). The Positive and Negative Syndrome Scale (PANSS) has been widely used in clinical trials of schizophrenia and other disorders and is considered the "gold standard" for assessment of antipsychotic treatment efficacy.(15) The Clinical Global Impressions Scale is, to a certain extent more informative,

because it describes a patient's overall clinical state as a global impression made on the rater. All 3 patients were "markedly ill" according to the CGI, approximately corresponding to a PANSS total score of above 95.(16)

Tab. Olanzapine orally was started as the first line of choice of treatment. Common side effects of Olanzapine include daytime drowsiness, weight gain, orthostatic hypotension, constipation and dry mouth which usually do not require medical attention unless bothersome. The patients were asked to keep a lookout for the same. The patients breastfed their babies post 4 hours of taking medication after expressing the initial breast milk. The babies were also started on top-feed. No sedation was noted in the babies. Psychological counseling was also done. There was symptomatic relief in the mothers along with improvement on the CGI and PANSS score following treatment indicating good prognosis. This helped to ameliorate the maternal and child health and to avoid prolonged hospital stay. Strict and regular fortnightly follow-up was advised for both the mother and the child.

CONCLUSION:

Three cases of postpartum psychosis diagnosed clinically with the aid of CGI and PANSS were started on tablet Olanzapine as the first line of choice of treatment. The patients continued to breastfeed without any sedation in the babies. They reported significant improvement in symptoms with minimal side effects. This highlights the importance of early diagnosis and timely treatment with appropriate drugs, and how it positively affects the prognosis. Olanzapine thus has the potential to change how post-partum psychosis is primarily treated.

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