

# Acute Transient Puerperal Psychosis: A Case Report

Zouhair Amarin,<sup>1</sup> Asma Basha,<sup>2</sup> Oqba. Al-Kuran,<sup>1</sup> Lama. Al-Mehaisen<sup>1</sup>

## Abstract

Postpartum psychosis occurs in 1 to 2 cases per 1000 post-partum women. This includes psychotic and bipolar disease. The impact of puerperal psychosis on the relationship between mother and infant could have long-term adverse effects on both mother and child.

Former mental illness is a major risk factor for puerperal psychosis, but the effect of other independent factors, such as birth complications and side effects of drugs and their interactions, it is not clear.

Some independent risks can be elucidated as causative factors of puerperal psychosis through the study of mothers that are affected by it, for the first time, in the puerperium.

Few reports have addressed this problem. We report, for the first time, a case of acute transient puerperal psychosis.

**Keywords:** Puerperal psychosis, Giving birth, Breastfeeding mothers.

(*J Med J 2015; Vol. 49 (3):183- 186*)

Received

Sept. 28, 2014

Accepted

July 13, 2015

## Introduction

Postpartum psychosis occurs in 1 to 2 cases per 1000 post-partum women. This prevalence includes both psychotic and bipolar episodes<sup>(1)</sup>. The effects of maternal psychosis on attachment and infant care in the puerperium can have long term adverse effects for mother and child<sup>(2)</sup>.

Whilst previous psychiatric illness is a major risk factor for post-partum psychosis<sup>(3)</sup>, it is not clear how much other independent risk factors, such as obstetric complications and drug side effects and interactions, may be relevant. By studying mothers with first psychotic episodes in the puerperium can some

independent risk factors be elucidated<sup>(4)</sup>. Few reports have addressed this problem. However, we report, for the first time, a case of acute transient puerperal psychosis.

## Case report

A 30-year-old Middle Eastern multiparous housewife, with 2 daughters aged 7 and 6, born normally at full term, presented during her third pregnancy, at 25 weeks gestation, with headache, BP of 180/110 mmHg and proteinuria of 3+. A diagnosis of severe pre-eclampsia was made. There was nothing of significance in her past medical, surgical and family history. She was on multivitamin and calcium tablets. System review was normal.

On examination, her uterine size

1. Department of Obstetrics and Gynecology, Jordan University of Science and Technology, Irbid, Jordan.

2. Department of Obstetrics and Gynecology, The University of Jordan, Amman, Jordan.

\* Correspondence should be addressed to:

Prof. Z. O. Amarin, E-mail: zoamarin@hotmail.com

P. O. Box: 850700, Amman 11185, Jordan.

corresponded with a 25 week gestation. There was no hyper-reflexia. A two-dimensional abdominal sonogram showed a continuing intrauterine singleton pregnancy with an estimated foetal weight of 668 gr. The CBC, KFT, LFT, U&E, RBS, urate and clotting profile were within normal. A 24 h urine collection revealed proteinuria of 9 gr. Electrocardiogram and cardiac echo were normal.

The patient was given Hydralazine, Amlodipine and MgSO<sub>4</sub>. A decision was made to terminate her pregnancy. Dinoprostone (PGE<sub>2</sub>) was administered vaginally.

On day 2, Paracetamol was prescribed for headache and confusion. In addition, Pethidine was administered to relief labour pain. Artificial rupture of the amniotic membranes was performed. This was followed by the administration of Syntocinon. Meconium staining was noted. Cefuroxime and Flagyl were prescribed.

On day 3, a live female baby was delivered with an Apgar score of 4, 5, 6 at 1, 5, 10 mins respectively. It was intubated, resuscitated and ventilated in the NICU. It died 16 hours later. A serum MgSO<sub>4</sub> level of 1.8 (normal up to 1.05 mmol/L) was noted, with no symptoms or signs of toxicity, for which Calcium Gluconate was administered. Same afternoon, the patient started to behave strangely, became agitated, restless, irritated, and started to hallucinate. She complained that people were following her, or hiding in the lockers. In addition, she was accusing her husband and staff of conspiring against her. Hypertensive encephalopathy was suspected. Brain MRI was normal. Haloperidol and Diazepam were prescribed. An offer for transfer to the psychiatric unit was declined. Anxiolytic and

antipsychotic medications were prescribed.

On day 4, the patient was fully recovered of her psychotic episode. She decided against continuing her anxiolytic and antipsychotic medications, and was discharged home. Follow-up was arranged for but she failed to attend. Telephone feedback confirmed that she was well.

## **Discussion**

In this report, we described an unusual case of a very acute, very transient psychotic disorder in the very early puerperium in a multigravida patient with no past psychiatric history. This is in contrast to available literature. Several studies have suggested that a previous pre-pregnancy or postpartum psychiatric illness substantially increases the risk of a new episode of a psychotic event during a subsequent ante-natal or puerperal period<sup>(3,5,6)</sup>. Furthermore, it has also been suggested that the risk of a first admission for psychosis is not increased after childbirth<sup>(6)</sup>, that the incidence of hospitalization for an episode of postpartum psychotic disorder is largely confined to women with a previous psychotic or bipolar illness<sup>(3)</sup>, and that women develop psychotic symptoms later in the postpartum period<sup>(5)</sup>.

On the other hand the diagnosis of delirium or acute confusional state which represents an organically caused decline from a previously-attained level of cognitive functioning has to be considered. Delirium typically appears suddenly with an identifiable time of onset. It is typified by fluctuating course, attentional deficits and generalized severe disorganization of behavior. It typically involves other cognitive deficits, and psychotic features such as hallucinations and delusions. It may be caused by a disease process outside the brain, such as infection or drug effects<sup>(8)</sup>.

To determine whether this acute transient episode of early puerperal psychosis or acute confusional state was associated with infection or the administered medications, a survey of the side effects and interactions of all administered drugs, and for infections were conducted. For psychotic reactions, it was found that hydralazine may cause depression, disorientation, or anxiety and that amlodipine may cause insomnia, nervousness, depression and abnormal dreams. The symptoms in this case did not match any of those side effects. The search for infection was negative.

Pregnancy may increase the incidence of recurrent psychotic or bipolar episodes compared with non-puerperal periods. Puerperal hormone shifts<sup>(9)</sup>, obstetrical complications<sup>(10, 11)</sup>, sleep deprivation<sup>(12)</sup>, and increased environmental stress are possible contributing factors.

Women with psychosis limited to the puerperium might have a distinct phenomenology. Bergink et al. in a prospective cohort study of 51 patients with first-onset puerperal psychosis compared to a control group of 6969 women found that women with postpartum psychosis had a significantly higher incidence of primiparity,

with a median onset of symptoms at 8 days' postpartum, and a median duration of episodes of 40 days<sup>(13)</sup>.

In a sample of 61 women with first onset of puerperal psychosis showed that, according to ICD-10 criteria, 29.5% were classified as having acute and transient psychosis<sup>(14)</sup>. Although the term puerperal psychosis is not a discrete nosologic entity, from the few available studies it might be concluded that in the post-partum period acute and transient psychoses represent a disorder that is different from other psychiatric disorders. Our case supports this view, and might be considered a variant of puerperal psychosis.

Future studies should assess certain prenatal obstetric markers to identify those at higher risk of a new or a recurrent onset of postpartum psychotic episodes. In addition, obstetricians need to inquire about psychiatric history, and if necessary, to consult and collaborate with their psychiatric and pediatric colleagues.

**Declaration of interest:** The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

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## ذهان نفاسي حاد وعابر: تقرير حالة

زهير عمارين<sup>1</sup>، أسماء باشا<sup>2</sup>، عقبة القرعان<sup>1</sup>، لاما المحيسن<sup>1</sup>

1- قسم النسائية والتوليد، جامعة العلوم والتكنولوجيا، إربد، الأردن.

2- قسم النسائية والتوليد، الجامعة الأردنية، عمان، الأردن.

### الملخص

إن اكتئاب ما بعد الولادة يحدث في 1-2 لكل 1000 حالة. ويشمل ذلك مرض الزهان ومرض ثنائي القطب. إن تأثير مرض الزهان النفاسي على علاقة الأم برضيعها ورعايتها له خلال فترة حمى النفاس يمكن أن يكون له آثار ضارة على المدى الطويل للأم والطفل معاً. إن المرض النفسي السابق هو عامل خطر ورئيس لاكتئاب ما بعد الولادة، لكنه ليس من الواضح إمكانية تأثير عوامل خطر مستقلة أخرى، مثل مضاعفات الولادة والآثار الجانبية للأدوية وتفاعلاتها.

يمكن توضيح بعض عوامل الخطر المستقلة من خلال دراسة الأمهات الذين يعانون من نوبة الزهان للمرة الأولى في فترة النفاس.

لم تناول تقارير كثيرة هذه المشكلة، ولذلك ولأول مرة نتقدم بدراسة حالة مرض زهان نفاسي حاد وعابر.

الكلمات الدالة: زهان نفاسي، الولادة، الأمهات الرضع.