

CASE REPORT

ANTENATAL DEPRESSION IN A HIGH-RISK PREGNANCY

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Abstract

Objective: This case report highlights antenatal depression as a common condition with potentially grave outcomes if left untreated. However, treatment options can be limited by the need to protect the fetus from medication-induced side effects. **Methods:** We report a young female obstetric patient who was carrying twins conceived through assisted reproduction, and her pregnancy was complicated by placenta previa major and repeated antepartum hemorrhages, which necessitated multiple admissions and strict bed rest. She became intensely depressed and anxious, developed suicidal ideation and refused examinations that were necessary to her physical health. She was referred to a psychiatrist and was given low-dose medication, supportive counseling, and case management. **Results:** She responded well to treatment, showing marked improvement in her mood and cooperation with obstetric care. Her twins were delivered at 35 weeks' gestation in good health. Her progress was maintained into the postpartum period. **Conclusions:** This case of antenatal depression was successfully treated using a combination of medication, case management and psychological support. It adds to evidence that this illness benefits from early identification and is highly treatable. *ASEAN Journal of Psychiatry, Vol. 15 (1): January – June 2014: 86-89.*

Keywords: Antenatal Depression, Antidepressants, Psychiatric Case Management

Introduction

Pregnancy is often assumed to be a joyous event, but the truth is that antenatal depression occurs in 12.2% of pregnant women in Singapore [1]. Left untreated, the illness can debilitate an expectant mother and put her at risk of self-harm. It can also restrict fetal growth and increase the risk of preterm labour. Furthermore, anxiety frequently accompanies and complicates depression, particularly in the first and third trimesters [2]. Subsequently, antenatal depression becomes a strong predictor for postnatal depression [3], which in turn predisposes toward parenting stress and difficulties in mother-infant bonding [4].

For these reasons, antenatal depression needs prompt identification and effective treatment. Yet, pregnancy limits the range of usable antidepressants because of the need to minimize fetal side effects. Paroxetine, for example, has been shown to increase the odds of fetal cardiac malformations by 1.7 times when taken in the first trimester [5]. Treating antenatal depression, therefore, requires a good balance between efficacy and safety. This case report illustrates how this has been achieved in an obstetric inpatient with a high-risk pregnancy. It has been written with her informed consent and the approval of the hospital's Institutional Review Board.

Case report

A healthy, married Chinese woman in her early thirties, working as a professional, underwent intrauterine insemination (IUI) because she and her husband had been unable to conceive naturally. The IUI was successful and resulted in dichorionic diamniotic twins, one male and one female. Unfortunately, the pregnancy was complicated by placenta previa major (PPM), which caused repeated antepartum hemorrhages (APH). The male fetus was also found to have ventriculomegaly. In addition, the patient was Group B Streptococcus positive.

After her third APH at 24 weeks' gestation, she was admitted for inpatient obstetric management. An ultrasound showed that her placental edge was touching the cervical os, and that there was a retroplacental clot, but fetal movements were good and there was no sign of premature labour. Treatment with oral Nifedipine and intramuscular (IM) Dexamethasone was quickly started, with satisfactory initial response. However, she became distressed about the cardiotocography (CTG) monitoring because the pickup was consistently poor for one of the twins, and she had a painful topical allergy to skin gel. She was repeatedly observed by the nursing staff to be "very anxious". Finally, she refused any further CTGs, and she was discharged against medical advice on the sixth day.

Another APH occurred the next day and she returned to the ward. She was given more Nifedipine and weekly IM Hydroxyprogesterone depots, and was confined strictly to bed. However, she continued to bleed and began to experience irregular contractions. Due to tachycardia and breathlessness, she was able to tolerate only low doses of intravenous (IV) Salbutamol. She started feeling intolerably depressed and overwhelmed, and continued refusing CTG monitoring as well as vaginal speculum examinations. During the second week of admission, she started to experience suicidal thoughts and asked to see a psychiatrist. During the psychiatric consultation, she was found to have definitive signs of depression and anxiety. Her mood was persistently low; her sleep, appetite and concentration were poor; her thoughts were extremely negative;

and she had fleeting urges to jump out the window. Much of this was due to uncertainty about her babies, as well as the sudden restriction from her usual activities. In addition, she was somewhat anxious and perfectionistic by nature, and had a deep but troubled Christian faith. She had come to associate APH with divine rejection, and took each bleed as a sign that God hated her, and wanted her and her babies dead. Although these thoughts were not of delusional intensity, they were persistent and caused her significant emotional distress. In the same way, she was oversensitive towards her husband and would think the worst of his intentions. For example, if he was late in visiting or spoke abruptly, she would immediately feel unloved and unwanted, and this would set off a quarrel. She condemned herself as having "no courage, no strength".

She was given Dothiepin up to a dose of 50mg nocte, and Promethazine theoclate - an antihistamine, for sedation- up to 37.5mg daily, in divided doses. After two days of this regime, her sleep improved and she became calmer. In addition to medication, she received support from her psychiatric case manager, who visited twice weekly to provide supportive counseling - based on cognitive behavior therapy techniques - and guide her through relaxation exercises. The patient was encouraged to cope with her catastrophic thinking by writing down her negative thoughts in a diary and coming up with a rational counter-argument to each one. She consciously wrote out positive past events as evidence that God and her husband loved her. She practised her relaxation exercises and found them to be helpful each time she approached an emotional breakdown.

Over the next few weeks, she continued having sporadic light bleeds, irregular contractions and breathlessness. She had to be moved to the labour ward for observation several times, which she found difficult because of the disruption, strict routines, and busy staff. Nonetheless, upon psychiatric review every few days, she was able to cope and cooperate better because she was feeling more cheerful and positive. She became insightful and motivated, and learnt how to self-counsel when she recognized her own over-reaction to events.

The PPM resolved with time and the bleeds stabilized. The male twin's ventriculomegaly remained mild and he had no other anomalies. The patient was able to leave her bed for short periods and practiced mobilizing with the aid of a physiotherapist. She was greatly pleased when her twins reached a viable age, and decided to maintain her pregnancy as close to term as she could manage. Dothiepin was gradually tailed down and taken off in the week preceding the delivery, in order to prevent withdrawal symptoms in the babies, while Promethazine was given only when needed. Finally, she underwent an elective Caesarean section at 35 weeks' gestation, giving birth to small but healthy twins who were discharged after a few days' observation in the neonatal high-dependency unit. Upon her own discharge, the patient was well enough to remain off psychotropic medication.

She was in stable condition during her outpatient psychiatric appointment six weeks later. Both her babies were healthy and gaining weight well, and she was taking much pleasure in them.

Discussion

Many factors came together to result in antenatal depression in this patient. In addition to the PPM, her son's ventriculomegaly, the side effects of her obstetric treatment, and her perfectionistic nature, she had to cope with the emotional issues intrinsic to the need for assisted reproduction. Women who have trouble conceiving are at increased risk of developing grief, self-blame, marital problems and mental illness [2]. Among Swedish couples seeking *in vitro* fertilization, the prevalence of mood disorders is 26.2%, while anxiety disorders are seen in 14.8% of the women [6]. With all this, it is easy to understand why this patient became depressed and anxious. Nonetheless, it was difficult, particularly for the obstetric nursing staff, to provide optimal care when she had suicidal thoughts and refused examinations that were pertinent to her physical condition. This highlights the importance of treating antenatal depression effectively and quickly.

The choice of a tricyclic antidepressant (TCA) for this patient was evidence-based. The NICE guidelines (Antenatal 2007) state that TCAs

have lower known risks during pregnancy than other antidepressants. Also, selective serotonin reuptake inhibitors (SSRIs) may increase the risk of persistent pulmonary hypertension in the newborn when used after 20 weeks' gestation [7]. Furthermore, a review of antenatal antidepressant use found an association between SSRIs and neonatal adaptation syndrome, which is a cluster of symptoms that includes irritability, tremor, poor feeding and respiratory distress in the newborn [8]. Dothiepin was given together with promethazine, which has been safely used as an antiemetic and sedative in pregnant women for decades. Both medications were prescribed at the lowest effective doses and tailed off a few days before delivery, so as to prevent neonatal withdrawal.

In addition to the biological benefits of medication, practical help and cognitive reframing were provided by the psychiatric case manager, in the form of rapport building, psychoeducation and supportive counseling [9]. These interventions are known to be efficacious and highly acceptable in perinatal patients [10]. In particular, this patient had a dedicated case manager, and was therefore able to feel that she had a constant and secure environment in which she could safely ventilate without fear of being judged.

Altogether, this multi-pronged approach – comprising low-dose medication, supportive counseling and case management – proved both efficacious and safe in the treatment of this patient with antenatal depression, and helps provide a framework to aid the recovery of other mothers in similar positions.

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