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**Case Report** 

# "I Don't Want to Give Birth": Clinical and Ethico-Legal Dilemmas and the Role of Graded Exposure Therapy on an Urgent Basis in a Post-Term Pregnant Woman with Blood-Injection-Injury Phobia

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#### **Abstract**

**Introduction:** Blood-injection-injury (BII) phobia is a common anxiety disorder that is non-fatal in most cases. Nevertheless, BII phobia in pregnancy can pose intricate medico-legal management issues.

**Case Presentation:** A 24 year-old post-term (40 weeks + 9 days) primigravida refused induction of labour because of BII phobia, thereby presenting a serious obstetrical dilemma due to the precarious balance between patient's autonomy and the pressing risk of intrauterine death. Caesarean section was successfully performed after sessions of urgent graded exposure therapy. **Conclusions:** This case highlights the importance of close multidisciplinary teamwork.

Keywords: Blood-Injection-Injury Phobia, Graded Exposure Therapy, Pregnancy

### 1. Introduction

Blood-injection-injury (BII) phobia is an acute excessive fear and avoidance of any medical procedures related to blood, injections, and injury. It is relatively a common phenomenon, with a lifetime prevalence of 3.5% in general population and a prevalence of 7.2% in pregnant women (1, 2). In post-term women, obstetric management becomes urgent. This faces the clinician with complex management issues when the patient refuses obstetric interventions such as caesarean section. We present the case of a young primigravida with BII phobia who refused obstetric interventions despite being post-term (40 weeks + 9 days).

## 2. Case Presentation

Ms. A, a 24-year-old obese primigravida, was admitted electively for delivery due to being post-term (40 weeks + 9 days) without signs of labour. Induction of labour was initially planned aiming at spontaneous delivery. However, due to suspected macrosomia, she was scheduled for lower segment caesarean section operation. Ms. A, however, refused to undergo any medical procedures. Every attempt to undertake these procedures triggered panic attacks, which lasted 10 - 15 minutes/episode with palpitations, shortness of breath, light-headedness, near-fainting,

trembling, and non-specific body aches. Ms. A was aware that her fear was out of proportion; but she was unable to control her anxiety.

Ms. A had developed intense fear of needles after repeated blood tests when she had dengue fever in childhood. She avoided all medical procedures since then. Throughout the pregnancy, she refused all antenatal blood investigations, vaginal examination, and psychiatric referral.

On the day of the scheduled operation, Ms. A was taught deep breathing exercise and given low dose oral midazolam of 3.75 mg after a difficult IV cannula insertion. General anesthesia with rapid sequence induction was planned for the operation. However, when she was already on the operating table, she became agitated, and refused facemask application for preoxygenation. She also changed her mind and refused to have the surgery.

A multidisciplinary case conference was convened including the obstetrics and gynecology, anesthetic, psychiatric, and legal team to discuss further management. The legal team pointed out that under prevailing laws, the patient had the right to withdraw consent for operation at any point before the procedure even though this would endanger the baby's life. From the obstetric point, there was an increased risk of fetal compromise and intrauter-

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ine death due to prolonged pregnancy.

A second attempt to take her to the operation theatre (OT) also failed.

On 40 weeks + 13 days, intensive graded exposure therapy was conducted urgently and continuously for 3 hours. This stepwise exposure focused on preparing the patient to face her fear towards all medical procedures, specifically the fear of needle and blood prior to entering the OT. First, relaxation techniques such as muscle relaxation and deep breathing exercises were taught as coping mechanisms. Next, a fear hierarchy was established with the patient grading the stimuli using units of distress. Subsequently, she was exposed to the stimuli in stages, starting from the least feared. She would inform the therapist whenever panic symptoms occurred and practiced the relaxation techniques with guidance until she reached a state of serenity. During the session, the patient successfully reached the interchange zone (dirty/sterile) in the theatre.

Late that night the patient developed regular contractions indicating that she was in labour. On the next morning, at 42 weeks, the psychiatric team accompanied the patient from the ward to the OT using the same principles of graded exposure therapy. The patient was successfully taken to the OT and caesarean section was performed under general anesthesia. Mother and child were discharged well on the 3rd day post-op.

The patient is now on regular psychiatric follow-up, receiving cognitive behavioral therapy.

# 3. Discussion

This case illustrated a complex medico-legal issue, in which patient's wishes conflicted with clinical decisions. Meantime, it emphasized the importance of multidisciplinary team work. There were a number of difficult areas that need to be addressed in this case.

First, the mother's right to withdraw consent to a procedure, even though that might endanger her baby's life, and take precedence over any purported right of the unborn. This is because according to Malaysian law, 'infant' does not include an 'unborn child' or a 'human fetus'; and the term 'existing human being' has never been interpreted to include an 'unborn child' or a 'human fetus'. An unborn child has neither rights to survival nor any right to legal redress (3). The legal team highlighted that although the patient had given signed consent earlier, her screaming protests in the OT constituted a withdrawal of the consent. Since she was not of unsound mind and her life was not in immediate danger, there was no legal justification to proceed with the operation. Hence, the potential for le-

gal proceedings against the treatment team was real even if there were no complications of delivery.

Second, the anesthetists faced a practical clinical difficulty. Central neuraxial anesthesia was not chosen for this case despite its established safety over general anesthesia for caesarean section because the patient needed to be cooperative, ensuring the safety and success of this technique (4). Parturients with obesity are known to have higher incidence of difficult airways, gastric acid aspiration, and oxygen desaturations compared to their nonobese counterparts (5, 6). Improper usage of sedative premedication for this patient may potentially cause airway and respiratory catastrophes. Hence, general anesthesia was carried out with some modifications in the technique. Rapid sequence induction following sufficient preoxygenation using facemask was performed to prevent gastric acid aspiration and oxygen desaturation. To ensure compliance with the procedure, sedation and analgesia were provided with target-controlled infusion of remifentanil, which started prior to the induction of anesthesia (7). The neonatologist was alerted regarding the administration of this potent but ultra-short acting opioid before delivery of the fetus.

Challenges faced by the obstetricians included the extreme time limitation of balancing behavior therapy for her BII phobia with prolonged pregnancy and its associated perinatal morbidities.

The psychiatric team was called in to ascertain if the patient was of sound mind and to provide therapy to the patient in the hope of reducing her anxiety sufficiently to allow the procedure to be carried out. Graded exposure therapy is usually not an emergency procedure. We could not find any report of urgent graded exposure therapy in the published literature, though single session treatment has been reported (8). In this case, we conducted graded exposure therapy on an urgent basis in view of the pressing circumstances. In any event, the onset of labour pains helped the patient cooperate with the delivery successfully.

Another major highlight in the management of this case is that close team work was imperative. There was not only consensus in the steps that would be taken, but also excellent coordination existed between the three clinical teams so that the moment the patient arrived in the OT, the anesthetists and obstetricians were able to immediately perform the procedure. Any delay might have jeopardized the operation by risking the exacerbation of the patient's anxiety.

This case illustrates that the management of blood injection injury phobia can be complicated in obstetrics practice where serious consequences to both the mother and the unborn child could occur. Since BII phobia is not uncommon among pregnant population, clinicians

should be aware of the pitfalls in the management, the legal implications, and the need for close multidisciplinary team work. Psychiatrists should be involved as early as possible. Behavioral treatment would be the treatment of choice in pregnant women. One session of graded exposure therapy could be effective.

#### **Footnotes**

**Authors' Contribution:** Daniel Teck Lung Wong, Aqmar Suraya Sulaiman, and Muhammad Zurrusydi Zainuddin contributed to the acquisition of data for the manuscript and drafting the manuscript. Lai Fong Chan, Suzaily Wahab, Voon Yee Lee, and Thambu Maniam contributed to critically revise the manuscript for important intellectual content. All authors read and approved the final manuscript.

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