

Severe Preeclampsia with Second Marriage; A Case Report

İkinci Evlilikte Görülen Şiddetli Preeklampsi; Olgu Sunumu

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Özet

Preeklampsi, gebeliklerin yaklaşık %8'ini ilgilendiren, hipertansiyon, proteinüri ile karakterize oldukça kompleks multifaktöryel bir hastalıktır. Multipar kadınlarda daha az ve daha hafif gözlenmektedir. Hakim olan görüş, ilk gebelikten sonra annenin immün sisteminin babanın antijenlerini tanıdığı ve takip eden gebeliklerde tolerans geliştirdiğidir. Eş değiştiren multipar kadınların daha fazla preeklampsi riski bulunduğu gösterilmiştir. Burada ikinci evliliğinde erken başlangıçlı şiddetli preeklampsi gelişen bir olgu sunulmuştur.

Anahtar Kelimeler: Preeklampsi, ikinci evlilik, multiparite.

Abstract

Preeclampsia is an extremely complex multifactorial disorder, characterised by hypertension, proteinuria, and complicates up to 8% of pregnancies. It occurs less frequently, and also less severe in multiparous women. The current hypothesis is that the maternal immune system has 'recognized' the paternal antigens after the first pregnancy, than establish a greater immune tolerance against the same antigens in following pregnancies. It was shown that, multiparous women had a higher risk of pre-eclampsia or hypertension after changing partner in the following pregnancy. Here in, a case report, developing early-onset severe preeclampsia from second marriage was presented.

Keywords: Pre-eclampsia, second marriage, multiparity.

Introduction

Preeclampsia is an extremely complex multifactorial disorder, characterized by hypertension, proteinuria, and complicates up to 8% of pregnancies. It is still remains leading cause of morbidity and mortality both in maternal and neonatal due to the hypertension for the vast majority of these cases (1).

Currently numerous hypotheses on the pathogenesis and etiology of preeclampsia are popular. One of these is the immune-immunogenetic maladaptation hypothesis. Based on this hypothesis immune maladaptation may, via an improper decidual expression of proteolytic enzymes, Free radical species, and Th1 cytokines cause both superficial invasion of spiral arteries by endovascular cytotrophoblast cells and systemic endothelial cell dysfunction (2, 3). Abnormal placentation is associated with an early onset pre-eclampsia and with intrauterine growth limitation (4).

This case report was prepared to highlight, an augmented risk of preeclampsia in multiparous women with second husband.

Case report

A 34 years old multipar pregnant woman at 30 weeks of gestation was referred to our clinic with a diagnosis of preeclampsia. She was considered as severe preeclampsia on admission. Ultrasonography was performed and the fetus was compatible with 28 weeks, and the amniotic fluid index was 3 cm. Her previous two pregnancies had been delivered at twelve and five years ago at term by vaginally. After five years from the second delivery, due to the presence of late decelerations during follow-up on non-stress test and considered as fetal distress, cesarean section was performed, a 1160 g weighted female fetus was delivered with vertex presentation, and the apgar scores were 5 - 7 at 1th and 5th minutes. Placental abruption was observed with in localized area. Three days after surgery the patient was discharged uneventfully.

Discussion

Pre-eclampsia occurs less frequently, and also less severe in multiparous women (5). The current hypothesis is that the maternal immune system has 'recognized' the paternal antigens after the first pregnancy, than establish a



greater immune tolerance against the same antigens in following pregnancies (6).

Indeed, most, but not all, previous studies have demonstrated that multiparous women had increased risk of pre-eclampsia or hypertension after changing partner in the afterwards pregnancy than multiparous female with the same partner [relative risk (RR) is varying from 1.2 to 8.6] (7). New paternal antigens may be introduced with partner changing. Therefore, maternal immune system has to re-create the immune tolerance. Based on the partner-specific hypothesis, partner changing could also be preventive for a repetition of pregnancy disrupts associated with abnormal placentation.

Women after changing partner usually have a longer birth interval and the pre-eclampsia rates in second pregnancy increases with this aperture, maternal age, BMI and years of unintended childlessness before second pregnancy (8).

Women who replaced partner also motioned more frequently and had a distinct life style and socio-economic condition compared with women in consistent relationships. All those factors are accountable to have an effect on the risk of pre-eclampsia, but time offers a particularly difficult appearance to disentangle (9).

In conclusion, there is a paternal applicable the development of placental dysfunction disorders, and for a multiparous woman who replaced partner, the risk of pre-eclampsia should be taken into consideration in subsequent pregnancies.

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