

Accepted Manuscript

Maternal plasma concentrations of macrophage migration inhibitory factor at first trimester as a predictive biomarker of preterm delivery in Chinese women

Hui Zhu, Mei-Jun Yang

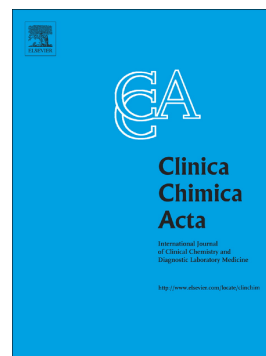
PII: S0009-8981(18)30196-7
DOI: doi:[10.1016/j.cca.2018.04.029](https://doi.org/10.1016/j.cca.2018.04.029)
Reference: CCA 15163

To appear in: *Clinica Chimica Acta*

Received date: 11 March 2018
Revised date: 12 April 2018
Accepted date: 19 April 2018

Please cite this article as: Hui Zhu, Mei-Jun Yang , Maternal plasma concentrations of macrophage migration inhibitory factor at first trimester as a predictive biomarker of preterm delivery in Chinese women. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Cca(2017), doi:[10.1016/j.cca.2018.04.029](https://doi.org/10.1016/j.cca.2018.04.029)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Maternal plasma concentrations of macrophage migration inhibitory factor at first trimester as a predictive biomarker of preterm delivery in Chinese women

Hui Zhu* zhuhfmu5910@163.com, Mei-Jun Yang

Department of NICU, Fujian Provincial Hospital, Provincial Clinical College of Fujian

Medical University, Fuzhou, Fujian, 350001, China

*Corresponding author at: Address: No 134, East street, Fuzhou, 350001, Fujian, China

Abstract

Background: Infection and/or inflammation have been proposed play role in the preterm delivery (PTD) pathogenesis. Macrophage migration inhibitory factor(MIF), a mediator of innate immunity and inflammation, is induced in various infections, including those that occur during pregnancy. We assessed the relation between maternal early pregnancy plasma concentrations of MIF and PTD.

Methods: Women were recruited before 14 weeks gestation and were followed up until delivery. Maternal plasma concentrations of MIF, C-reactive protein (CRP) and interleukin 6 (IL-6) at first visit were measured by competitive immunoassay. The diagnosis of PTD was made using American College of Obstetricians and Gynaecologists (ACOG) guidelines. Logistic regression procedures were used to calculate adjusted odds ratio (OR) and 95% confidence intervals (95%CI).

Results: In the study period, 596 participants were included. The median plasma concentration of MIF was significantly higher in women in whom PTD later developed compared with those delivering at term ($P<0.001$). For each 1 ng/ml increase of plasma concentration of MIF, the unadjusted and adjusted risk of PTD would be increased by 12% (with the OR of 1.12 [95% CI 1.07–1.17], $P<0.001$) and 7% (1.07 [1.02–1.15], $P=0.002$), respectively. Stratified analyses indicated that increased MIF was associated with an increased risk of spontaneous delivery (OR= 1.16, 95%CI: 1.07-1.24; $P<0.001$), indicated

Download English Version:

<https://daneshyari.com/en/article/8309553>

Download Persian Version:

<https://daneshyari.com/article/8309553>

[Daneshyari.com](https://daneshyari.com)