

## 題目：懷孕高血壓和末期腎病的相關

### **Association between hypertensive disorders in pregnancy and future end-stage renal disease: a population-based study**

I-Kuan Wang, MD<sup>1,2,3</sup>, Chih-Hsin Muo, MS<sup>4</sup>, Chih-Chia Liang, MD<sup>3</sup>, Chiz-Tzung Chang, MD, PhD<sup>3</sup>, Shih-Yi Lin<sup>3</sup>, MD, Chiu-Ching Huang, MD<sup>3</sup>, Fung-Chang Sung, PhD<sup>4</sup>.

王怡寬<sup>1,2,3</sup>, 莫之欣<sup>4</sup>, 梁志嘉<sup>3</sup>, 張志宗<sup>3</sup>, 林詩怡<sup>3</sup>, 黃秋錦<sup>3</sup>, 宋鴻樟<sup>4</sup>.

<sup>1</sup>Graduate Institute of Clinical Medical Science, China Medical University, <sup>2</sup>Department of Internal Medicine, College of Medicine, China Medical University,

<sup>3</sup>Division of Kidney Disease, China Medical University Hospital, <sup>4</sup>Department of Public Health, China Medical University.

<sup>1</sup>中國醫藥大學臨醫所, <sup>2</sup>中國醫藥大學醫學系, <sup>3</sup>中國醫藥大學附設醫院腎臟科, <sup>4</sup>中國醫藥大學公衛系.

#### **Background:**

Studies on the association between hypertensive disorders in pregnancy and end-stage renal disease (ESRD) are limited. This study investigated the ESRD risk after delivery for women with hypertensive disorders in pregnancy. .

**Methods:** We used insurance claims data of 1998-2009 to identify 26,651 women aged 19-40 years old with hypertensive disorders in pregnancy, without the baseline history of hypertension, diabetes, kidney disease, or lupus. We further randomly selected 213,397 women without the disorders in pregnancy as the comparison cohort, with frequency matched by age and the index year of pregnancy. Incidence rates of ESRD were compared between the two cohorts by the end 2009. Hazard ratios (HRs) were calculated with controlling for demographics and clinical factors.

**Results:** The women with hypertensive disorders in pregnancy had a greater risk of chronic kidney disease and ESRD, with adjusted HRs of 9.38 (95% CI 7.09-12.4) and 12.4 (95% CI 8.54-18.0), respectively, after controlling for urbanization, coronary artery disease, congestive heart failure, hyperlipidemia and abruption. The HR for ESRD decreased to 2.72 (95% CI 1.76-4.22) after further controlling for hypertension and diabetes. Women with preeclampsia/eclampsia had a higher adjusted HR of 14.0 (95% CI 9.43-20.7) than those with only gestational hypertension (adjusted HR 9.03, 95% CI 5.20-15.7).

**Interpretation:** Women with hypertensive disorders in pregnancy are at a high risk of subsequent ESRD. The risk increase much higher for women with preeclampsia/eclampsia, compared with those with only gestational hypertension.

**Keywords:** End-stage renal disease, gestational hypertension, preeclampsia, pregnancy. (末期腎病, 妊娠高血壓, 子癇前症 懷孕)