

## DELIVERY MODE IN PRIMIPAROUS WOMEN AND POSTPARTUM URINARY INCONTINENCE: A NATIONAL MULTI-CENTER PROSPECTIVE COHORT STUDY IN MAINLAND CHINA

### Hypothesis / aims of study

This research is aimed to obtain epidemiological data on the delivery mode in primiparous women and its impact on the prevalence of UI in mainland China.

### Study design, materials and methods

The study was conducted to follow up 10,418 primiparous women since their early pregnancy from Sep 2007 to May 2009 in fourteen maternity units in seven regions. Modified Bristol Female Lower Urinary Tract Symptoms (IQ-BFLUTS) questionnaire was used to collect data on delivery mode in primiparous women and to estimate prevalence of UI at six months postpartum.

### Results

A full dataset was available for analysis in 10,098 women, qualified rate 97% (10,098/10,418). 51% of this population experienced vaginal delivery versus 49% underwent cesarean section (C-section). C-section rate was significantly higher in urban primiparous women (54.9%) than in rural women (43%) ( $P < 0.001$ ). Elective C-section rate was 27.5%, while 21.5% for non-elective C-section. Elective C-section rate was significantly higher than non-elective C-section rate both in urban and rural primiparous women ( $P < 0.001$ ).

Prevalence of UI at six months postpartum was 10.1% (522/5154) for vaginal delivery versus 3.3% (165/4944) for C-section ( $P < 0.001$ ). No significant difference of postpartum UI prevalence rate was seen between elective C-section group and non-elective C-section group in six-month follow-up ( $P = 0.719$ ).

### Interpretation of results

In multivariate Logistic Regression Analysis of delivery mode, C-section was protective factor for SUI of primiparous women at six months postpartum. No significant difference of postpartum SUI prevalence rate was seen between elective and non-elective C-section group in six-month follow-up.

### Concluding message

C-section rate was nearly 50% in Chinese primiparous women, higher in urban women than rural ones. Short-time labor without vaginal delivery causes less risk of injury to pelvic floor. C-section is the protective factor for postpartum SUI.

### Disclosures

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**Subjects:** HUMAN **Ethics Committee:** Ethics Committee of PUMC Hospital **Helsinki:** Yes **Informed Consent:** Yes