

POSTNATAL URINARY INCONTINENCE AND TWIN PREGNANCY

Hypothesis / aims of study

To determine the impact of twin pregnancy and delivery as a risk factor in developing postnatal stress urinary incontinence [1].

Study design, materials and methods

A retrospective study comparing 117 patients who had delivered twins to 117 patients who had delivered singletons between January 2003 and December 2005 at Poissy / St-Germain-en-Laye hospital was conducted. The onset of postnatal stress urinary incontinence, its severity and its impact on the quality of life were studied.

Results

After excluding those who didn't respond to the auto-questionnaire; 60 patients in the exposed group (twin gestation) and 59 in the non-exposed group (singleton gestation) constituted the final sample. The medium-term follow-up of the study was 20.2 months. The prevalence of stress urinary incontinence in our study was 20%. Stress urinary incontinence was significantly higher in the exposed group than in the non-exposed group ($p = 0.03$). The univariate analysis found 7 risk factors: prenatal urinary incontinence, urinary incontinence in the period immediately postpartum, a BMI > 30, labor duration > 8 hours, fundal pressure during labor, twin gestation and an intrauterine fetal weight > 5000 g. After a multivariate logistic regression analysis, only a fetal weight > 5000 g and prenatal urinary incontinence were identified as risk factors.

Interpretation of results

Twin pregnancy is significantly associated with postnatal stress urinary incontinence more than 20 months after delivery (odds ratio (OR) = 2.6, [1, 1-5, 9]). However, after adjusting for the total uterine fetal weight (> 5000 g) and the total labor duration (> 8 hours), twin gestation does not seem to be a direct risk factor for stress urinary incontinence. Only an intrauterine fetal weight > 5000 g and prenatal urinary incontinence were significantly associated with postnatal stress urinary incontinence ($p = 0.002$; OR = 4.6).

Concluding message

The urethral hypermobility, which is most frequently seen in cases of twin gestation as a result of the increase in the total intrauterine fetal weight, could cause progressive alteration of the supporting system of the urethra and explain the increase in the rate of postnatal stress urinary incontinence in twin pregnancy [2, 3].

References

1. Glazener CM, Herbison GP, MacArthur C, et al. New postnatal urinary incontinence: obstetric and other risk factors in primiparae. *Bjog* 2006;113:208-17
2. Goldberg RP, Kwon C, Gandhi S, Atkuru LV, Sorensen M, Sand PK. Urinary incontinence among mothers of multiples: the protective effect of cesarean delivery. *Am J Obstet Gynecol* 2003;188:1447,50; discussion 1450-3
3. Peschers U, Schaer G, Anthuber C, Delancey JO, Schuessler B. Changes in vesical neck mobility following vaginal delivery. *Obstet Gynecol* 1996;88:1001-6

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Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
Is this a Randomised Controlled Trial (RCT)?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	No
This study did not require ethics committee approval because	Written information was given directly to patients included
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes