

MATERNAL, FETAL AND OBSTETRICAL INFLUENCE FACTORS CONCERNING THE ORIGIN OF INCONTINENCE SYMPTOMS POST PARTUM

Aims of Study

Up to 40 % of women have symptoms of urinary and/or anal incontinence after childbirth.

It was the aim of this study was to evaluate if the event of delivery itself or an interaction of certain factors, for example the mode of delivery, a prolonged second stage of labour, third degree perineal tears, lead to incontinence symptoms.

Methods

The data of consecutive term deliveries (>37 week of gestation) at a large department of obstetrics and gynecology between May 1999 and June 2000 were collected and stored in a data bank.

5 – 10 months post partum each of these woman received a questionnaire with detailed questions concerning urinary incontinence (stress incontinence, urge incontinence), stool- and wind incontinence. The data collected included maternal parameters (BMI, age, parity), fetal parameters (weight, head circumference) and obstetrical parameters (duration of the first and second stage of labour, oxytocin infusion, perineal tears, episiotomy, mode of delivery). A prolonged second stage of labour was defined as a two hours or longer. Statistical analysis included the Chi-Square-Test and the Mann-Whitney-Test, statistical significance was defined as $p < 0.05$.

Results

Out of 1200 questionnaires 579 were returned completed, 380 returned uncompleted, because the patient had moved from the area and no current address could be found and 241 women did not answer. 398 (68.6%) had been delivered spontaneously, 102 (17.5%) by caesarean section, 77 (13.2%) by vacuum extraction and 3 (0.5%) by forceps. 92 (19.4%) of the women had a prolonged second stage of labour. 28 (4.8%) of the women had a third degree perineal tears.

Wind incontinence occurred significantly more often in the following groups:

1. third degree perineal tears (21.4%) versus no perineal tear (7.2%) $p=0,006$
2. episiotomy (median or mediolateral) 11.5% versus no episiotomy 6.1% $p=0.025$
3. any vaginal birth 9.22% versus caesarean section 0.8% $p=0.004$.
4. BMI (body mass index) <19 versus >19 , $p=0.006$
5. duration of oxytocin infusion <130 min. versus >130 min. $p=0.013$

Stress incontinence was found significantly more frequent after vaginal birth (18.9%) then after caesarean section (9.8%) $p=0.03$.

Third degree perineal tears were found more often in women with:

1. fetal head circumference >36 cm versus <36 cm $p=0.015$
2. primiparae (8%) versus multiparae (2.6%) $p=0.016$.
3. prolonged second stage of labour 12% versus normal second stage 4.4%, $p=0.001$

Conclusion

Post partum incontinence is associated with various parameters, most of them can not be avoided. Third degree perineal tears be avoided by diminishing the use of midline episiotomies.