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# INCONTINENCE AFTER VAGINAL DELIVERY: ASSOCIATION WITH A PROLONGED SECOND STAGE OF LABOUR

### Aims of Study

Recent investigations of women after the delivery showed that 5-40% suffer from incontinence. Aim of the 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.

#### <u>Methods</u>

The data of 1200 consecutive deliveries from 1999 – 2000 were collected and stored in a data bank. Each of these women received a questionnaire with detailed questions approx. 10 months following the delivery. The topics were questions on urinary, faecal and wind incontinence. Out of 1200 women 580 (46.3%) answered completely, 380 (31.7%) of the questionnaires were undeliverable because the recipient had moved and 240 (20%) women did not answer.

Incontinence after delivery was defined as follows: involuntary loss of urine, associated with coughing, sneezing or other increases of intraabdominal pressure occurring at least several times per week (stress incontinence), or associated with a strong feeling to void (urge incontinence), the involuntary loss of gas (wind incontinence) or liquid / solid stool (faecal incontinence). The 580 women, who answered gave birth as follows: spontaneous delivery (sd) 396 (68%), caesarean section (sc) 102 (17.5%) – 51 elective and 51 secondary caesarean section, vacuum extraction (ve) 77 (13.2%) and forceps delivery (fd) 3 (0.5%). A second stage of labour of more then two hours was defined as prolonged (pss).

SPSS for Windows was used for statistical analysis.

#### Results

	pss	ve	sd	td	pss + ve
urge incontinence	27.7 %	29.8 %	29.8 %	28.5 %	29.7 %
stress incontinence	29.6 %	31.6 %	19.7 %	25.0 %	27.3 %
wind incontinence	28.7 %	15.6 %	9.6 %	25.0 %	29.8 %
faecal incontinence	2.4 %	2.6 %	3.8 %	7.1 %	4.2 %

pss= prolonged second stage of labour

ve = vacuum extraction

sd = spontaneous delivery

td = third degree perineal tears

Wind incontinence occurred significantly more often in women with a prolonged second stage of labour (p=0.002) and in women who had suffered from a third degree perineal tears (p=0.006). No correlation to symptoms of urinary incontinence was found. Women after elective caesarean section had significantly fewer symptoms of wind and faecal incontinence.

### **Conclusions**

A prolonged second stage of labour is associated with a significant increase of the prevalence of wind incontinence.