

## **Tables**

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**Table 1. Characteristics and descriptive non-modifiable variables for cases and controls**

Variables	Primiparous women		Multiparous women	
	Case n=275	Control n=275	Case n=146	Control n=146
Birthweight in gram, mean (SD)	3678.3 (512.2)	3467.7 (560.9)*	3974.5 (541.2)	3608.1 (672.6)*
Birthweight quartiles	275 (50)	275 (50)*	146 (50)	146 (50)†
<3300 gram	65 (11.8)	102 (18.5)	12 (4.1)	32 (11.0)
3300–3650 gram	63 (11.5)	78 (14.8)	31 (10.6)	38 (13.0)
3660–4040 gram	82 (14.9)	54 (9.8)	41 (14.0)	36 (12.3)
≥4040 gram	65 (11.8)	41 (7.5)	62 (21.2)	40 (13.7)
Length in cm, mean (SD)□	51.1 (2.1)	50.4 (2.5)*	51.9 (2.5)	50.8 (3.1)*
Head circumference in cm, mean (SD)□	35.2 (1.5)	34.9 (1.6)*	36.1 (1.3)	35.3 (1.6)*
Gestational age in days, mean (SD)□	282.0 (12.1)	278.7 (14.8)†	283.2 (9.6)	278.7 (16.4)†
Gestational age categories□	274 (50.6)	268 (49.4)§	145 (51)	139 (49)ns
Preterm (<37 weeks)	6 (1.1)	16 (1.1)	4 (1.4)	7 (2.4)
At term (37–42 weeks)	234 (43.2)	233 (43)	131 (44.9)	122 (41.8)
Post term (>42 weeks)	34 (6.3)	19 (3.5)	10 (3.4)	10 (3.4)
Maternal age in years, mean (SD)	26.7 (4.2)	25.7 (4.7)†	31.0 (4.6)	29.6 (4.4)†
Maternal age category	275 (50)	275 (50)†	146 (50)	146 (50)ns
<25 years	83 (15.1)	115 (20.9)	11 (3.77)	18 (6.16)
25–29 years	122 (22.2)	107 (19.5)	46 (15.8)	57 (19.5)
>30 years	70 (12.7)	53 (9.6)	89 (30.5)	71 (24.3)
Fetal presentation□	275 (50%)	275 (50%)ns	146 (50.2)	145 (49.8)ns
Occiput anterior	257 (46.7)	257 (46.7)	134 (46.1)	138 (47.4)
Deep transverse	0	1 (0.2)	0	1 (0.3)
Occiput posterior	14 (2.6)	7 (1.3)	9 (3.1)	4 (1.4)
Breech	4 (0.7)	10 (1.8)	3 (1.0)	2 (0.7)

1 <sup>st</sup> stage of labour in min, mean (SD) <sup>a</sup>	368.5 (195.8)	314.8 (186.3)*	268.4 (163.1)	197.3 (154.9)*
2 <sup>nd</sup> stage of labour in min, mean (SD)	46.6 (27.5)	41.4 (25.1) <sup>§</sup>	29.3 (22.3)	19.2 (17.3)*
Apgar score <7 at 1 min	15(5.5)	18 (6.6) <sup>ns</sup>	8 (5.5)	8 (5.5) <sup>ns</sup>
Apgar score <7 at 5 min	4 (1.5)	4 (1.5) <sup>ns</sup>	3 (2.1)	4 (2.7) <sup>ns</sup>

Data are presented as n (%) unless indicated otherwise. \*p<0.001, <sup>#</sup>p<0.01, <sup>§</sup>p<0.05, ns = not significant. <sup>a</sup>Missing data: Length=15; Head circumference=10; Gestational age=16; Fetal presentation=1; Duration of first stage of labour=1.

**Table 2. Characteristics and descriptive modifiable variables for cases and controls**

Variables	Primiparous women		Multiparous women	
	Case n=275	Control n=275	Case n=146	Control n=146
Induction of labour	26 (9.5)	14 (5.1)*	13 (8.9)	10 (6.9) <sup>ns</sup>
Amniotomy	63 (22.9)	18 (6.6)*	33 (22.6)	11 (7.5)*
Augmentation with oxytocin	165 (60)	119 (43.3)*	71 (46.7)	36 (23.7)*
Episotomy <sup>a</sup>	190 (69.1)	171 (62.2) <sup>ns</sup>	66 (45.2)	34 (23.3)*
Maternal birth position <sup>a</sup>	275 (50%)	264 (46.2%) <sup>§</sup>	146 (51.2)	139 (48.8) <sup>§</sup>
Supine/sitting	221 (40.2)	203 (36.9)	111 (39.0)	97 (34.0)
Side bearing	19 (3.5)	29 (5.3)	12 (4.2)	20 (7.0)
Standing	2 (0.4)	2 (0.4)	6 (2.1)	4 (1.4)
Kneeling	15 (2.7)	14 (2.6)	5 (1.8)	11 (3.9)
Stool	18 (3.3)	16 (2.9)	12 (4.2)	7 (2.5)
Fundus pressure	38 (13.8)	35 (12.7) <sup>ns</sup>	14 (9.6)	5 (3.4) <sup>§</sup>
Instrumental delivery				
Vacuum extraction	52 (18.9)	22 (8.0)*	17 (11.6)	3 (2.1) <sup>#</sup>
Forceps	41 (14.9)	18 (6.6) <sup>#</sup>	8 (5.5)	1 (0.7) <sup>§</sup>

Data are presented as n (%) unless indicated otherwise. \*p<0.001, <sup>#</sup>p<0.01, <sup>§</sup>p<0.05, ns = not significant. <sup>a</sup>Missing data: Episotomy=2; Maternal birth position=18.

**Table 3. Multivariate conditional logistic regression analysis for obstetric anal sphincter injury among primiparous women**

Variable	n	Crude		Adjusted	
<b>Non-modifiable variables</b>					
Birthweight quartiles	550				
<3300 gram	167	Reference		Reference	
3300–3650 gram	141	1.22	0.77–1.96	0.90	0.52–1.55
3660–4040 gram	136	2.36	1.47–3.81	2.27	1.31–3.93
≥4040 gram	106	2.42	1.45–4.01	2.13	1.18–3.84
Maternal age category	550				
<25 years	198	Reference		Reference	
25–30 years	229	1.57	1.07–2.29	1.68	1.08–2.62
>30 years	123	1.87	1.17–2.99	2.04	1.17–3.57
<b>Modifiable variables</b>					
Amniotomy	81	4.00	2.27–7.04	4.84	2.60–9.02
Augmentation with oxytocin	284	1.98	1.39–2.81	1.63	1.08–2.46
Instrumental delivery					
Vacuum extraction	74	2.76	1.59–4.81	1.91	1.03–3.57
Forceps	59	2.64	1.42–4.89	2.37	1.14–4.92

R<sup>2</sup> = 0.22

Data are presented as odds ratio with 95% confidence intervals.

**Table 4. Multivariate conditional logistic regression analysis for obstetric anal sphincter injury among multiparous women**

Variable	n	Crude		Adjusted	
<b>Non-modifiable variables</b>					
Birthweight quartiles	292				
<3300 gram	44	Reference		Reference	
3300–3650 gram	71	3.42	1.24–9.46	5.58	1.56–20.0
3660–4040 gram	80	4.91	1.70–14.2	6.90	1.86–25.7
≥4040 gram	109	7.13	2.57–19.8	11.4	3.10–42.2
<b>Modifiable variables</b>					
Amniotomy	44	3.44	1.64–7.23	3.76	1.45–9.76
Augmentation with oxytocin	107	3.19	1.82–5.59	3.70	1.79–6.67
Episiotomy*	101	2.88	1.66–5.00	2.63	1.36–5.14

R<sup>2</sup> = 0.28

Data are presented as odds ratio with 95% confidence intervals.

\* n is reduced by 2 from 292 to 290 due to missing data on episiotomy