

# SPONTANEOUS PRETERM DELIVERY – CAN WE PREDICT THE TIME INTERVAL FROM ADMISSION TO DELIVERY?

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## OBJECTIVE

To identify predictors for short time interval from admission to delivery in women with spontaneous preterm delivery (PTD) <34 weeks of gestation.

## MATERIALS AND METHODS

- A retrospective cohort study (2007-13)
- All women who delivered <34 weeks of gestation.
- Women with admission to delivery interval  $\leq 48$  hours were compared to those with interval >48 hours.
- **Exclusion:** indicated PTD, suspected amnionitis, abruption, maternal fever, vaginal bleeding or fetal anomalies.

## RESULTS

|                 | Delivery $\leq 48$ h<br>N=231 | Delivery > 48 h<br>N=99 | P value |
|-----------------|-------------------------------|-------------------------|---------|
| Age (y)         | 30.9 $\pm$ 7.0                | 31.0 $\pm$ 5.7          | 0.85    |
| Nulliparity     | 109 (47.2)                    | 38 (38.4)               | 0.14    |
| Previous PTD    | 46 (19.9)                     | 23 (23.2)               | 0.23    |
| Past PPRM       | 16 (6.9)                      | 7 (7.1)                 | 1.0     |
| Previous LLETZ  | 0 (0)                         | 0 (0)                   | 1.0     |
| Uterine anomaly | 8 (3.5)                       | 5 (5.1)                 | 0.54    |
| Twins           | 108 (46.8)                    | 35 (35.4)               | 0.06    |
| Gestational HTN | 0 (0)                         | 0 (0)                   | 1.0     |
| Preeclampsia    | 3 (1.3)                       | 2 (2.0)                 | 0.63    |
| GDM             | 21 (9.1)                      | 12 (12.1)               | 0.42    |
| Oligohydramnios | 24 (10.4)                     | 16 (16.2)               | 0.14    |
| Cerclage        | 12 (5.2)                      | 5 (5.1)                 | 1.0     |
| Progesterone    | 34 (14.7)                     | 27 (27.3)               | 0.009   |
| Celestone       | 122 (52.8)                    | 65 (65.7)               | 0.03    |
| Tocolitics      | 79 (34.2)                     | 43 (43.4)               | 0.13    |

## CONCLUSION

Risk factors for short admission to delivery interval can be identified in women with spontaneous PTD <34 weeks of gestation. This may aid the physician in the decision making process regarding the need for prompt intervention.

|                            | Delivery $\leq 48$ h | Delivery > 48 h   | P value |
|----------------------------|----------------------|-------------------|---------|
| Admission GA               | 30.7 $\pm$ 2.5       | 29.7 $\pm$ 3.0    | 0.009   |
| PPROM                      | 101 (43.7)           | 48 (48.5)         | 0.47    |
| Contraction sensation      | 169 (73.2)           | 58 (58.6)         | 0.02    |
| Contraction in CTG         | 166 (71.9)           | 61 (61.6)         | 0.07    |
| <u>Cervical conditions</u> |                      |                   |         |
| Dilatation (cm)            | 2.6 $\pm$ 2.6        | 1.6 $\pm$ 1.9     | <0.001  |
| $\geq 2$ cm                | 113 (48.9)           | 34 (34.3)         | 0.01    |
| Effacement $\geq 80\%$     | 116 (50.2)           | 37 (37.4)         | 0.04    |
| Length (mm)                | 16.8 $\pm$ 10.4      | 18.6 $\pm$ 11.9   | 0.43    |
| Cesarean delivery          | 125 (54.1)           | 52 (52.5)         | 0.81    |
| Interval (h)               | 11.3 $\pm$ 12.4      | 246.7 $\pm$ 276.2 | <0.001  |
| GA delivery (wks)          | 31.0 $\pm$ 2.3       | 30.6 $\pm$ 2.5    | 0.22    |