

The role of cervical length measurement for preterm delivery prediction in women with cervical dilatation who present with threatened preterm labor

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OBJECTIVE

To determine whether sonographic cervical length is an effective predictive tool in women with threatened preterm labor (PTL) and cervical dilatation.

MATERIALS AND METHODS

- A retrospective cohort study of all women with singleton pregnancies who presented with PTL at less than 34+0 weeks and underwent sonographic measurement of cervical length (2007-2012).
- The accuracy of cervical length in predicting preterm delivery (PTD), defined as delivery <37, <35 or <32 weeks of gestation or within 14 days from examination, was compared between women with (0.5-3cm) and without cervical dilatation.

RESULTS

| Outcome | Closed cervix group | | Cervical dilatation group | | | |
|-------------------------|---------------------|---------|---------------------------|---------|------------------------------------|---------|
| | Overall N=792 | | Overall N=276 | | Cervical Dilatation ≥ 1cm N=201 | |
| | OR (95%-CI) | P-value | OR (95%-CI) | P-value | OR (95%-CI) | P-value |
| Delivery <37+0 weeks | 0.95 (0.93-0.96) | <0.001 | 0.93 (0.90-0.96) | <0.001 | 0.92 (0.89-0.95) | <0.001 |
| Delivery <35+0 weeks | 0.93 (0.91-0.95) | <0.001 | 0.93 (0.90-0.96) | <0.001 | 0.92 (0.88-0.96) | <0.001 |
| Delivery <32+0 weeks | 0.93 (0.90-0.97) | <0.001 | 0.95 (0.90-1.01) | 0.10 | 0.93 (0.87-0.99) | 0.04 |
| Delivery within 14 days | 0.93 (0.90-0.97) | <0.001 | 0.93 (0.89-0.97) | 0.001 | 0.92 (0.87-0.96) | 0.001 |

CONCLUSION

Even in women presenting with threatened PTL and cervical dilatation, cervical length is an effective predictive tool for PTD.