

# **Delivery Outcomes of Short Cervix After 28 weeks in Singleton Pregnancies**

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## **Objective**

With an incidental finding of a short cervical length defined as 25mm after 28 weeks in the absence of painful contractions, rupture of membranes, or cervical dilation, there are minimal if any studies on the maternal – fetal outcomes. The objective is to determine if a shortened cervical length in a singleton pregnancy beyond 28 weeks gestational age is associated with preterm delivery <37 weeks.

#### Methods

This is an IRB exempt, retrospective chart review from August 2015 to September 2021 of all women with singleton gestations who received a transvaginal ultrasound at Mount Sinai South Nassau. Patients were excluded if they had multiple gestation, advanced dilation >3cm, rupture of membrane, or fetal anomalies seen on ultrasound. Delivery outcomes were compared between patients with a shortened cervical length found after 28 weeks with patients who had a normal cervical length as defined as >25mm in the 2<sup>nd</sup> trimester past 20 weeks. Indications to perform a transvaginal ultrasound past 20 weeks include prior preterm birth, vaginal pressure, recent hospitalization, or history of spotting or cramping that did not meet criteria for hospital evaluation. Data analysis was performed with a multivariable logistic regression model of delivery time and cervical group adjusting for covariates. These variables included age, ethnicity, BMI, GDMA and pregnancy induced hypertension. Significant values are those considered with p <.05.

### Results

In singleton pregnancies, a shortened cervical length beyond 28 weeks gestational age is not associated with preterm delivery <37 weeks when compared with singleton pregnancies who had a normal cervical length in the 2<sup>nd</sup> trimester (OR = 1.070 [0.484, 2.366] P= 0.868).

## Conclusion

There are limited studies on the maternal-fetal outcomes for incidental findings of a shortened cervical length after 28 weeks. The results of this study show that in a singleton pregnancy, a shortened cervical length (<25mm) after 28 weeks has no association with preterm delivery < 37 weeks when compared with patients who had a normal cervical length in the 2<sup>nd</sup> trimester.