

ABSTRACT

OBJECTIVE:

To examine the potential value of routine measurement of cervical length in singleton low-risk primigravid pregnancies at 37 weeks of gestation in the prediction prolonged pregnancy and outcome of labour .

DESIGN AND SETTING:

The study was conducted at the Obstetrics and Gynaecology unit, Teaching Hospital, Ragama and De Soysa Maternity Hospital Sri Lanka at June 2008 to May 2009. The study was carried out as a prospective observational study. Consenting subjects fulfilling the entry criteria was be enrolled into the study at 37 weeks of POA. During this visit they have undergone a TVS to assess the cervical length. They. The unit policy of admitting all women at 40 weeks to the antenatal ward was adhered to. The delivery details of every participant was collected by the investigator. Rest of the obstetrics management of the patient was strictly according to the unit protocol, which was to induce labour at completed 41+1 weeks.

METHODS:

Cervical length was measured by transvaginal sonography at 37 weeks in 281 singleton low-risk pregnancies. Outcome measures were gestation at spontaneous onset of labor, post-term delivery, duration of labor and mode of delivery.

RESULTS:

The median cervical length at 37 weeks was 28 mm and there was a significant association between cervical length and gestation at delivery. The incidence of delivery after 41 weeks and 1 day was 54 (19.2%). It is noteworthy that a significant positive correlation between cervical length at 37 weeks and gestational age at delivery was noted. This finding is consistent with a high association between cervical length at 37 weeks and gestation at spontaneous onset of labor. Moreover, in this study, cervical length at 37 weeks ≥ 28 mm had a sensitivity of 83.33% and a specificity of 97.29% in the prediction of prolonged pregnancy. Furthermore in this study this cut off point had good positive predictive value (89.29%) and high negative predictive value (95.56%). In the pregnancies requiring induction for post-term the incidence of Cesarean section for failed induction or failure to progress was 7.1% for cervical lengths more than 28 mm.

CONCLUSION:

Measurement cervical length at 37 weeks can predict the likelihood of prolonged pregnancy and is associated with the gestation at spontaneous onset of labor in low-risk primiparous women. So measurement of cervical length at 37 weeks can define the likelihood of spontaneous delivery before 40 weeks and 8 days and the risk of Cesarean section in those requiring induction for prolonged pregnancy.