

CERVICAL LENGTH IN MIDPREGNANCY AND LABOUR OUTCOME

ABSTRACT

It is a prospective study conducted in the Institute of Obstetrics and Gynecology, Madras Medical College from January 2015 to March 2016.

AIM AND OBJECTIVES

The objective is to study the relationship between cervical length at midpregnancy and 1) Gestational age at delivery, 2) Onset of labour, whether spontaneous or induced, 3) Mode of delivery, 4) Caesarean section due to failed induction, 5) To determine the mean cervical length in our population.

MATERIALS AND METHODS

500 antenatal women were included in the study. Transvaginal ultrasound was done between 19-24 weeks and cervical length was recorded. The women were subsequently managed according to the hospital protocol. The women were followed up to term and their labour outcome was recorded.

The maternal characteristics like age, body mass index and socioeconomic status were analysed for any confounding factors. Labour outcome analysed were the onset of labour whether spontaneous or induced, gestational age whether preterm or postdated, mode of delivery and the caesarean section due to failed induction.

RESULTS

The mean cervical length for patients who went into preterm labour is 3.263 and for those who did not go into preterm labour is 3.655 ($P < 0.001$). The mean cervical length for patients who had postdated pregnancy is 3.863 and for those who did not have postdated pregnancy is 3.578 ($P = 0.03$). The mean cervical length for patients who had spontaneous onset of labour is 3.549 and for those who did not have spontaneous onset of labour is 3.817 ($P < 0.001$). The mean cervical length for patients who had caesarean delivery is 3.772 and for those who did not have caesarean delivery is 3.46 ($P < 0.001$). The mean cervical length for patients who had caesarean delivery due to failed induction is 3.897 and for those who did not have caesarean delivery due to failed induction is 3.559 ($P < 0.001$). The probability of caesarean section due to failed induction increases 4 fold with 1cm increase in cervical length.

CONCLUSION

Lower the cervical length, higher is the risk of preterm labour. Increase in the cervical length at midtrimester is associated with increased in the incidence of postterm pregnancy, failure of spontaneous onset of labour, cesarean section in view of failed induction. Thus, measurement of cervical length by transvaginal ultrasound at mid trimester can be used as an easy predictive tool to determine the possible outcome of labour and risk of cesarean section.

KEY WORDS

Cervical length, Preterm labour, Postdated pregnancy, Cesarean section in view of failed induction.