ABSTRACT

Aim:

To investigate how the location of the placenta at term pregnancies affects the duration of the third stage of labor and to discuss the possible mechanisms affecting the duration of the third stage

Methods:

The placental implantation was determined as anterior ($n = 129$), posterior ($n = 80$), or fundal ($n = 126$) by ultrasound, in 335 women with singleton pregnancies. After delivery of the newborn, oxytocin was routinely given. Duration of the third stage of labor was compared with the location of the placenta using ANOVA. $P < 0.05$ was determined as significant.

Results:

The duration of the third stage of labor was 6.75+/- 4.83min, 7.37+/- 6.11 min and 5.04+/-3.02min with placentas located anteriorly, posteriorly, and fundal, respectively. The length of the third stage was significantly shorter in the fundal placenta group.

Conclusion:

In this study, the length of the third stage of labor was approximately 2 min shorter with placentas located at the fundus compared to the other two groups. The mechanism responsible for shorter duration may be the bipolar separation of fundal placentas in contrast to usual unipolar down-up separation of anterior or posterior placentas. Another contributing factor may be the use of oxytocin for the management of the third stage, however this should be investigated by further studies, using real time ultrasonography.