Introduction

We aimed to investigate if ultrasound determination of fetal head position at start of the active phase of labour could predict the duration of labour and the mode of delivery.

Methods

99 nulliparas with a singleton, cephalic fetus in spontaneous labour at term were examined with transabdominal and transperineal ultrasound at Landspitali University Hospital, Reykjavik. Occiput position was classified like positions on a clock face with the categories of OA (≥10≤2), LOT (≥2<4), OP (≥4≤8] and ROT (>8<10).

Results

The distributions into position groups and delivery mode is shown in Fig. 1. The position on a clock face at start of active phase in Fig. 2 and at birth in Fig. 3. The estimated median time in active labour in non-OP positions was 506 min vs. 677 min in OP positions (log rank test, p=0.07). Hazard ratio for chance of spontaneous vaginal delivery for non-OP vs. OP was 0.66 (95%CI 0.42-1.05) (Fig. 4). The association between caesarean section (CS) and non-OP vs. OP position was not significant (p=0.27).

Conclusion

Occiput posterior positions were common at the start of the active phase of labour, but position were not associated to the duration of labour or the risk of CS.