P06.09 How reliable is fetal occiput and spine position assessment prior to induction of labor?

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Objectives
To assess the reliability of fetal occiput and spine position determination in nulliparous women prior to the induction of labor (IOL). We aimed also to evaluate the value of identifying the fetal occiput and spine positions prior to IOL in the prediction of labor outcome.

Methods
A series of 136 nulliparous were recruited immediately after the decision of induction of labor. Transabdominal ultrasound was performed to determine fetal head and spine position. After at least one hour, and prior to induction of labor, fetal occiput and spine positions were reassessed. Fetal occiput and spine position were then compared between women who underwent vaginal delivery (VD) and those who delivered by Cesarean section (CS).

Results
Fetal occiput position was anterior in 55 (40.4%) and in 62 (45.6%), transverse in 52 (38.2%) and in 49 (36.0%), and posterior in 29 (21.3%) and in 25 (18.4%) of women on the first and second assessment, respectively.

On the other hand, spine position was anterior in 58 (42.6%) and in 52 (38.2%), transverse in 42 (30.9%) and in 50 (36.8%), and posterior in 34 (25%) and in 36 (26.5%) of women on the first and second assessment, respectively.

Regarding fetal occiput position, discordance between the first and second assessment was identified in 34 (25%). Women undergoing CS had a comparable incidence of occiput posterior in comparison with the VD group (19 (18.8%) vs. 6 (17.1%); P=0.826) and of fetal posterior spine position (27 (26.7%) vs. 7 (20%); P=0.428). Lastly, women with OP position had a longer induction-to-delivery duration in comparison with those with non-OP position.

Conclusion
Fetal occiput and spine positions are dynamic in a considerable proportion of women undergoing induction of labor. Furthermore, both assessments do not seem to correlate with the mode of delivery.