

Prediction of fetal gender during the 11-13 weeks scan

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Objective

Our objective was to examine the accuracy of fetal gender prediction at a routine first trimester scan and to evaluate possible factors that affects it.

Methods

We included 255 consecutive singleton pregnancies that had a routine first trimester scan. All scans were performed from a single fetal medicine doctor using the same ultrasound machine (E6 Voluson, GE) with a transabdominal method. Fetal gender was assessed at the vertical (CRL) view of the fetus and fetal gender was assigned as male if the angle of the genital tubercle to a horizontal line through the lumbosacral skin surface was greater than 30 degrees and as female if the genital tubercle was parallel or less than 10 degrees to the horizontal line. Results were compared with the actual gender at birth. Furthermore, factors as maternal weight, fetal CRL, scan visibility quality, placental site and actual fetal gender were included in the study.

Results

Out of the 255 cases fetal gender was predicted correctly in 236 fetuses (92.5%). Prediction in male (n=144, 56.5%) fetuses seems to be more accurate (93.75%) in comparison to female (n=111, 43.5%) fetuses (90.99%), although fetal gender did not correlate with the prediction. Maternal weight (mean 68, 6Kg), placental site (anterior placenta, 48.8% vs not an anterior placenta, 51.2%) and scan visibility quality (good, 89.5%, vs restricted, 10.5%) did not correlate with the prediction results. Only the size of the fetus (mean CRL: 62, 5mm) significantly affected our predictions (p=0.01).

Conclusion

Fetal gender determination in the first trimester was correct in 92.5% of cases and the accuracy increased with the gestational age. No further factors were identified to affect it.