OP02.09 Antenatal diagnosis of fetal micrognathia by ultrasound: which is the most reproducible method?

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Objectives: to evaluate the reproducibility of US methods to diagnose fetal micrognathia.

Methods: retrospective study on fetuses (18-28 weeks) seen at UCLH from 2000 to 2018. Four quantitative methods previously reported to assess micrognathia on fetal profile images:
- inferior facial angle (IFA),
- frontonasomental angle (FNMA),
- maxilla-nasion-mandible angle (MNMA)
- facial maxillary angle (FMA)

Two sonographers measured each angle twice, blinded to each other.

Results: 132 fetuses had suspected micrognathia but only 49 of them had a profile picture available, 22 had TOP, 5 fetal demise and 3 NND. According to Bland Altman plot, FNMA was the most reproducible while FMA was the least reproducible. Intraoperator and interoperator reproducibility 95% confidence intervals were 3.5% and 9.5% for FNMA and 11.6% and 45% for FMA respectively.

Conclusions: Quantitative methods to assess micrognathia are poorly reproducible but if need to be used, FNMA should be preferred.