Objectives:
To analyse the diagnostic value of 3D Omniview Ultrasound in analysis of fetal face and detection of cleft palate.

Methods:
• In this study 350 patients with normal pregnancy in second trimester were included. Patients were scanned on GE E10 ultrasound with RM6C transabdominal probe. The analysis of fetal face in Omniview technique was performed from the volume obtained from fetal profile position, in High2 resolution and with sweep angle of 65 degrees. After obtaining fetal face image in surface rendering, the analysis was continued in Omniview mode. First plane represented frontal face with retronasal triangle. In second plane fetal maxilla and palate were analysed. In third plane fetal mandible was reconstructed. In 3 patients with suspected fetal cleft palate we performed the same procedure.

Results
• In 350 patients we did not detect any abnormality of fetal face and we followed them up until delivery. No abnormality of fetal face was confirmed on delivery.

In 3 patients who were referred with suspicious fetal cleft we performed detailed analysis of fetal face in 3D surface rendering mode and also in 3D Omniview mode. Utilizing Omniview procedure, we confirmed unilateral cleft of lip and palate in two patients and bilateral cleft and palate in one patient. We performed genetic analysis in all patients with clefts and excluded chromosomal abnormalities in all of them. Detected anomalies were confirmed on delivery.

Conclusion
• In 3D Omniview Ultrasound mode it is possible to analyse the morphology of fetal face and facial bones. Fetal nose, maxilla, hard palate, and mandible can be visualized in separate planes and abnormalities of fetal face development can be confirmed.