The mean gestational age at booking was 15 ± 3.5 weeks with systolic blood pressure (SBP) of 124 ± 3.5 mmHg and diastolic blood pressure (DBP) of 75 ± 15 mmHg. The mean gestational age at diagnosis was 28.4 ± 4.0 weeks gestation. The mean SBP at diagnosis was 153.0 ± 32.0 mmHg and DBP was 97.9 ± 11.6 mmHg. Most women were delivered by Caesarean section (n = 24, 77.4%). The median gestational age at delivery was 30.6 ± 3.6 weeks. In terms of neonatal outcomes, the median birthweight was 1036.8 ± 64.6 g. Sixteen percent of pregnancies ended in intrauterine demise (IUD) (n = 5). A total of 26 (96.3%) infants were admitted to the special care nursery. The most common UA abnormality was an elevated PI (n = 17, 54.8%) and 22 (71%) patients showed redistribution in the MCA. Five patients showed DV abnormalities. The lowest mean birth weight was seen in the DV group, (650 g) and all infants in this group were delivered by C-section and all had neonatal deaths. Sixty percent of infants in the ductus venosus group were ventilated versus 23.8% in the MCA and UA group and 20% in the UA group. CONCLUSIONS: Most fetuses less than thirty weeks had absent or reversal of end diastolic flow (AREDF) in the UA while in those greater than thirty weeks the most common finding was an elevated umbilical artery pulsatility index. No finding of reversal of end-diastolic flow was seen in fetuses greater than thirty weeks. An explanation for this is that pregnancies affected by preeclampsia less than thirty weeks usually have more severe disease and therefore more severe uteroplacental insufficiency resulting in findings of more absent and reversal of end diastolic flow (AREDF) in this group. When comparing doppler abnormality groups, the ductus venosus group had the lowest mean birthweight for gestational age and all infants were delivered by Caesarean section. All the neonates in this category had neonatal deaths. Late changes in DV dopplers signifies fetal cardiovascular compromise and awaiting evidence of DV abnormalities may mean that the fetus has already decompensated. We found that cerebral redistribution or brain-sparing did not impact on neonatal outcomes when compared to UA doppler abnormality. Our study suggests that gestational age less than thirty weeks and abnormal DV dopplers are associated with higher neonatal deaths, therefore, these are important predictors of outcome in growth-restricted fetuses in severe preeclampsia.

**P3-23**

**Clinical significance of novel 3D HDlive silhouette and HDlive flow**

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**OBJECTIVES:** 3Dlive Silhouette and HDlive flow equipped on new ultrasound system have been installed in October, 2014. This revolutionary advance of novel techniques may possess an infinite potential from its attractive images. The aim of this study was to investigate images with new technology and discuss the potential of clinical significance in prenatal imaging. METHODS: Between October and December of 2014, 1,125 cases were examined by new ultrasound machines (Voluson E10, GE healthcare, Milwaukee, USA). Various organs and vascularity were demonstrated by using new technology. RESULTS: By using these new applications, can demonstrate completely different fetal images from conventional ultrasound images. From early pregnancy, HDlive silhouette could depict intracorporeal cystic area such as brain vesicles, ventricles, eye lens/hyaloid and cystic lesions such as ventriculomegaly, fused ventricle, enlarged bladder and renal cysts. Furthermore, skeletal structure could be demonstrated. HDlive flow demonstrates early intruterine