

TITLE: Clinical features of pre-eclampsia in 2613 Central Asian women and babies recruited for genetic studies

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Introduction InterPregGen is investigating the genetic basis of pre-eclampsia in women from Europe, Central Asia and South America. Recruitment of 4000 women affected by pre-eclampsia, their partners and babies, and 4000 pregnant control women is on-going in Kazakhstan and Uzbekistan.

Objective Assessment of clinical features of pre-eclampsia in Central Asia.

Methods The ISSHP definition of pre-eclampsia was used to identify women with new onset hypertension and proteinuria at 7 maternity units in Kazakhstan and 9 units in Uzbekistan. Pregnant controls had no history of hypertension in pregnancy. 1021 white European women recruited to the UK GOPEC genetic study of pre-eclampsia were used for comparison.

Results Data were available from 1716 Kazakh and 897 Uzbek cases. 54% of Kazakh women with pre-eclampsia were primiparous, compared with over 70% of Uzbek and UK recruits. Factors predisposing to pre-eclampsia included high BMI ($P<0.001$) and family history of pregnancy hypertension ($P<0.001$). Amongst parous women, >20% had a past history of hypertensive pregnancy. SBP and DBP at first antenatal visit were higher in cases than controls in Kazakh ($P<0.001$), but not Uzbek, women. Pre-eclampsia was diagnosed earlier in the UK, but gestation at delivery was uniform across the 3 populations. Raised liver enzymes and/or low platelets were recorded in <1.0% of Central Asian women, compared with 8.9% of UK women. Placental abruption was recorded in 7.7% of Uzbek women with pre-eclampsia, compared with 1.7% and 2.6% of Kazakh and UK women respectively. Eclampsia affected <1% of Central Asian pre-eclamptic pregnancies. Fetal mortality associated with pre-eclampsia from still birth or death within 6 weeks is higher in Central Asia than in the UK (4.2% v 2.2%).

Conclusions Interim analysis confirms common risk factors for pre-eclampsia in Central Asian women, and highlights areas of concern regarding outcomes for babies and mothers which merit further enquiry.