amino acids were analyzed by ion exchange chromatography (IEC).

Results: There were alterations of amino acids in patients with an albumin ⩽3 gr/dL compare with those with an albumin >3 gr/dL. Essential amino acids and non-essential amino acids were significantly different (Hotteling T0.05). Regression analysis revealed that 94% of the alteration of 10 amino acids influenced albumin concentration.

Conclusions: Alteration of the plasma amino acid profile influenced albumin concentration in preeclampsia. Plasma albumin changes were influenced by more than one amino acids rather than single.

Disclosures: A. Aditiawarman: None. E.G. Dachlan: None.

doi:10.1016/j.preghy.2014.10.108

[103-POS]

An online data collection system for preeclampsia research to enable data harmonization and merging across studies, with generation of very large, statistically powerful datasets: the CoLab Database Project

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Objectives: Preeclampsia is a complex syndrome with variable phenotypes that suggest differing underlying pathogenic pathways. Definition of phenotypes and pathways demands very large datasets achieved by combining data from multiple studies. This ideally requires that the data are harmonized before collection and prior to merging. To this end, we have presented a strategy (1) of standardized data and biosample collection. To facilitate its adoption CoLab proposes that a standard database is created to be used online by interested investigators.

Methods: The database will collect minimal and optimal datasets as previously outlined (1), the latter being an extension of the former. It is designed for online data acquisition and storage but will be available as a standalone system. It will allow for site-specific add-ons to address local priorities and could also serve as the template for study of other adverse pregnancy outcomes and for clinical studies.

Results: The online database will be available free of charge to low and middle income countries with a minimal monthly maintenance charge, applicable to high income countries.

Conclusions: Acquisition of data in a standardized format across the globe will allow data to be pooled, achieving sufficient statistical power to discriminate sub-types of preeclampsia. These data could then be utilized to analyze underlying pathophysiology and to define phenotype outcomes and specific therapies.

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Disclosures: L. Myatt: None. C.W. Redman: None.

doi:10.1016/j.preghy.2014.10.109

[104-POS]

Acute Blood Pressure response to antihypertensives after experimental preeclampsia

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Objectives: Blood pressure (BP) elevation after experimental reduction in uteroplacental blood flow in primates is associated with proteinuria and has been a surrogate for studying placental dysfunction manifesting as preeclampsia in humans. Controlling BP is the mainstay of treatment but the effect of antihypertensive treatment on the acute BP response is poorly understood in this animal model.

We examined the effect of three oral antihypertensive agents in the treatment of BP in an experimental setting to determine the BP response.

Methods: Papio hamadryas (baboon) BP was recorded continuously via intra-arterial telemetry in late pregnancy after induction of placental ischaemia by surgical ligation of a uterine branch artery. Proteinuria, haematology, biochemistry and fetal growth were assessed. Antihypertensives hydralazine 15 mg bid, methyldopa 10 mg/kg bid and labetalol 40 mg bid were administered orally for four days followed by a three-day washout phase. The average BP change for each drug from day 1 and 2 of treatment compared to day 3 and day 4 of treatment was evaluated.

Results: The antihypertensives resulted in a reduction in BP (average 1.4 mmHg, $n = 2$). Hydralazine and methyldopa showed a 0.4 mmHg and 2.4 mmHg reduction in systolic BP respectively, whereas labetalol showed no decrease; hydralazine and methyldopa showed a 0.5 mmHg and 1.8 mmHg reduction in diastolic BP respectively, and labetalol showed a 0.6 mmHg decrease in diastolic BP.

Conclusions: Preliminary data shows that hydralazine and methyldopa cause an acute decrease in systolic BP and diastolic BP in an experimental model of preeclampsia in non-human primates. The lack of BP reduction with labetalol may reflect altered drug efficacy or metabolism in this species or inadequate dosing.

Disclosures: S.J. Pears: None. A. Hennessy: None. S. Lim: None. K. Chau: None. K. Yeung: None. S. Heffernan: None. A. Makris: None.

doi:10.1016/j.preghy.2014.10.110