**PS09.4**

**Changes in the Artery Wall Layer Dimensions in Women with Preeclampsia: An investigation using non-invasive high frequency ultrasound**

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**Background:** Preeclampsia (PE) is associated with increased risk for cardiovascular disease later in life. Whether, the artery wall layer dimensions differ between PE and normal pregnancy is unclear. The aim of this study was to estimate if women with PE have different common carotid artery wall layer dimensions than women with normal pregnancy, both during pregnancy and about one year postpartum.

**Methods:** By using high-frequency (22MHz) ultrasound (Collagenoson, Meudt, Germany) separate estimates of the common carotid artery intima and media layers were obtained and the I/M ratio was calculated in women with PE (n=55 during pregnancy and n=48 at postpartum) and with normal pregnancy (n=65 during pregnancy and n=59 at postpartum). Thick intima, thin media and a high intima/media ratio are signs of less healthy artery wall and vice versa.

**Results:** In women with PE, the intima was thicker (0.18 ± 0.03 vs. 0.11 ± 0.02; p < .001), the media was thinner (0.47 ± 0.12 vs. 0.55 ± 0.14; p = .001) and the I/M ratio was higher (0.41 ± 0.14 vs. 0.20 ± 0.05; p < .001) compared to women with normal pregnancy. Further, for changes from pregnancy to postpartum, both for PE and normal pregnancy, the intima and the I/M ratio had improved but still significantly higher in women with PE than in women with normal pregnancy.

**Conclusion:** In women with PE, we found a thicker intima, thinner media and a higher I/M ratio compared to women with normal pregnancy, indicating a more negatively affected artery wall layer dimensions. Persisting negative effects of PE on artery wall at postpartum, despite improvement of artery wall layers compared to values during pregnancy, indicates a permanent damage of the vascular system in this group of women.

**PS09.5**

**Obstetric outcome after intervention for severe fear of childbirth in nulliparous – randomized trial**

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**Objective:** To compare obstetric outcome and delivery satisfaction among women with fear of childbirth randomized either to psychoeducation or conventional surveillance during pregnancy.

**Design:** Randomized controlled trial.

**Methods:** In the maternity unit of Helsinki University Central Hospital, 4575 pregnant, nulliparous women were screened for fear of childbirth with Wijma Delivery Expectancy Questionnaire. After screening, 371 (8.1%) women whose score exceeded limit ≥100 (severe fear) were randomized to inter-vention (n=131) (psychoeduca-tive group therapy, six sessions during pregnancy and one after child-birth) or control group (n=240) (care by community nurses and referral if necessary). Obstetric data from the deliveries was collected from patient records and delivery satisfaction was examined by a questionnaire.

**Outcomes:** Delivery mode and satisfaction.