



## Spotlight on Special Topics

### ECHOCARDIOGRAPHIC EPICARDIAL FAT THICKNESS AS A PREDICTOR FOR RECURRENCE OF PREGNANCY-INDUCED HYPERTENSION IN EGYPTIANS

Poster Contributions

Poster Hall\_Hall F

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**Background:** Pregnancy-induced hypertension is one of the most common complications and the first cause of morbidity & mortality in pregnant women. It is associated with metabolic disturbances such as lipolysis, hyperlipidemia, and vascular disease. Fibronectin is a plasma marker originating from embryonic and regenerating or injured tissues, which is significantly higher in hypertensive pregnancies. Epicardial fat tissue (EFT) is a cardiometabolic risk factor that may be linked to hypertension. Limited studies reported EFT correlation with the severity of preeclampsia. Our cohort studies the value of plasma FN and EFT as non-invasive markers for early screening for the first occurrence or recurrence of PIH in Egyptian pregnant women.

**Methods:** Prospective observational study where 48 pregnant patients were included (Thirty-three with a previous history of PIH and fifteen primigravid women were recruited in the 2nd trimester). Serial laboratory assessment, including 2nd and 3rd trimester FN level, a complete transthoracic echocardiographic assessment, and echocardiographic EFT measurement were performed. The included candidates were followed up two months postpartum for detection of PIH.

**Results:** Thirteen patients had PIH during the current pregnancy (four primigravid & nine women with a previous history of PIH). FN levels at 2nd and 3rd trimesters confirmed their value for early detection of PIH (sensitivity 92.3%, 84.6%, and specificity 94.3%, 60%, respectively). EFT was significantly higher in women with a history of PIH in a previous pregnancy than the primigravid women ( $P < 0.001$ ). Although there was a moderate positive correlation between plasma FN and EFT ( $r = 0.319$ ,  $P = 0.27$ ), EFT failed to show any predictive values for PIH early screening.

**Conclusion:** Plasma FN and 2nd-trimester ABI can be used for early screening of PIH before clinical findings in primigravid as and in women with a history of previous PIH.