

# Placental Growth Factor (PLGF)

## is a predictive test for screening antenatal preeclampsia?

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**Objective:**

PET associated with adverse maternal and perinatal outcome, early prediction/diagnosis & management could improve the outcome.

PLGF is angiogenic protein secreted by syncytiotrophoblast that promotes placental angiogenesis. In healthy pregnancy, PLGF increases as gestation advances and it peaks at 30 weeks gestation. Low PLGF value <100 pg/ml, aids in the prediction /diagnosis of PET and could anticipate delivery within 14 days from the test.

NICE guideline 'Hypertension in pregnancy diagnosis and management' recommended PLGF test for high risk women between 20 to 35 weeks gestation. PARROT study stated performing PLGF up to 36+6 weeks has good negative predictive value at 97%.

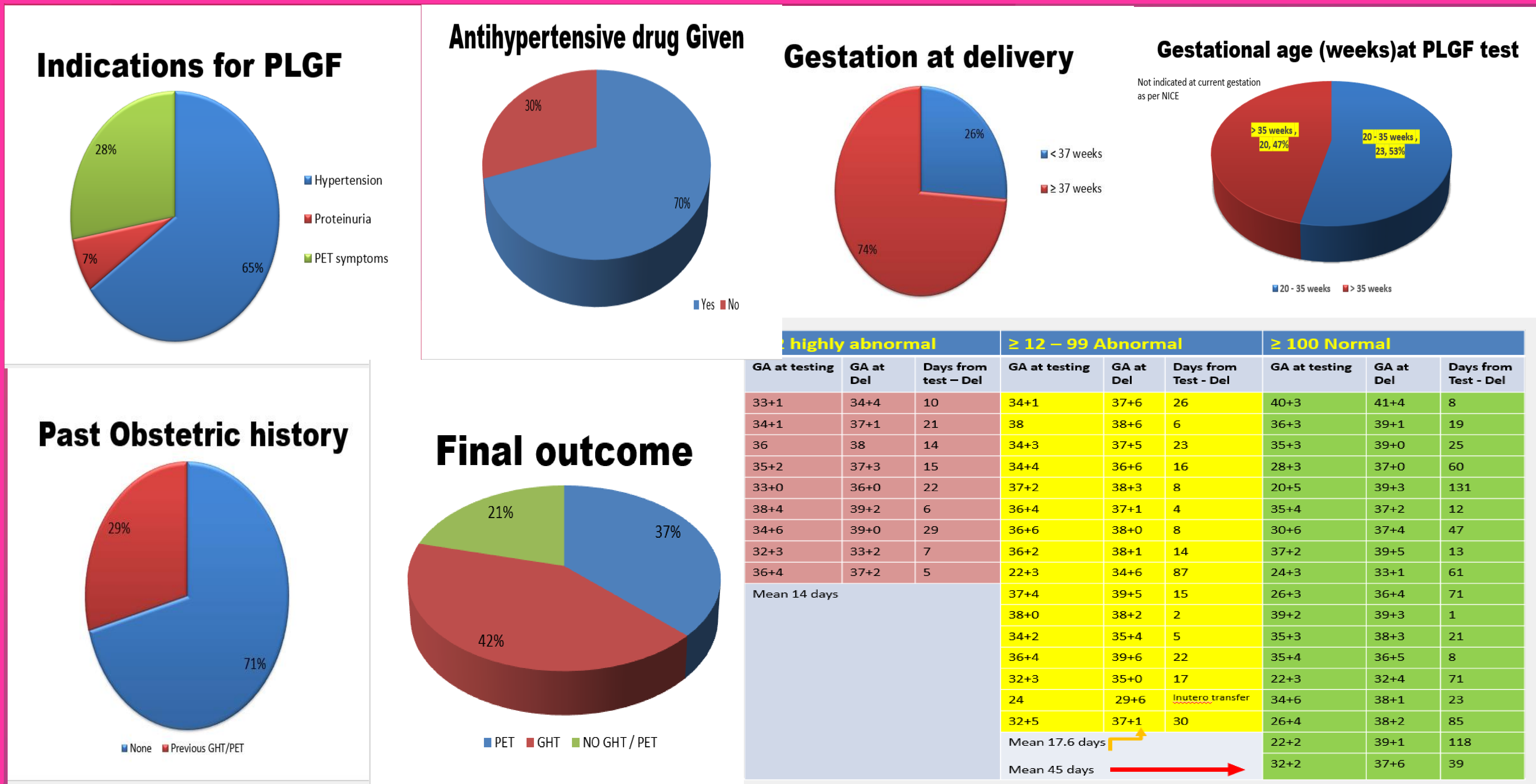
**Design:**

Retrospective audit from 1st July 2020 to 3rd February 2021 to assess the efficiency of PLGF in the prediction /diagnosis of PET and to review the outcome of women with abnormal result.

43 women had the test.

**Results:**

65% of women had the test for raised blood pressure. In 28% and 7% the test was performed for PET symptoms and proteinuria respectively. 16/43 (37%) of women developed PET (12/16 had abnormal PLGF <100pg/ml while 4/16 had normal result >100 pg/ml. 18/ 43 (42%) diagnosed with gestational hypertension (9/18 had abnormal result). 70% of women required antihypertensive medication. 26% had PTB due to severe PET. Mean delivery interval within 14 days noted in women who had PLGF <12 pg/ml and within 17.5 days when PLGF value ≥12 – 99 pg/ml. Eleven women their foetuses were small for gestation (8/11 had abnormal PLGF). Nine babies were admitted to the special care baby unit due to prematurity.



**Conclusion**

There was no adverse outcome. Half of women would admit to the hospital regardless result of PLGF based on PET symptoms, blood pressure and urine test. The audit was excellent opportunity to raise obstetrician awareness about the PLGF test and its indications!