

INTRODUCTION

- Preeclampsia (PE) is a multisystem disorder of pregnancy comprising of onset of hypertension with significant proteinuria after 20 weeks’ gestation in a previously normotensive woman.
- It has various short term and long term maternal and fetal adverse effects making it imperative to have an effective screening tool in place.

AIMS & OBJECTIVES

To analyze the relative efficacy of different FTS methods for prediction of pre-eclampsia.

METHODOLOGY

- Retrospective observational study from August 2021 to February 2022 on women who underwent enhanced FTS in a tertiary care center to study the outcomes and analyze the best screening methodology.
- Enhanced FTS comprises of **maternal risk factors, Mean arterial blood pressure, Uterine artery Doppler (UAD) measurement & serum biomarkers** (PaPP-A, PlGF) between 11 to 13+6 weeks of gestation. A risk of 1:100 was used to consider a result as screen positive.
- Delivery outcomes were analyzed
- Screen positive patients (by history, low PaPP-A or high uterine artery pulsatility index) were started on prophylactic low dose aspirin of 150 mg once daily.

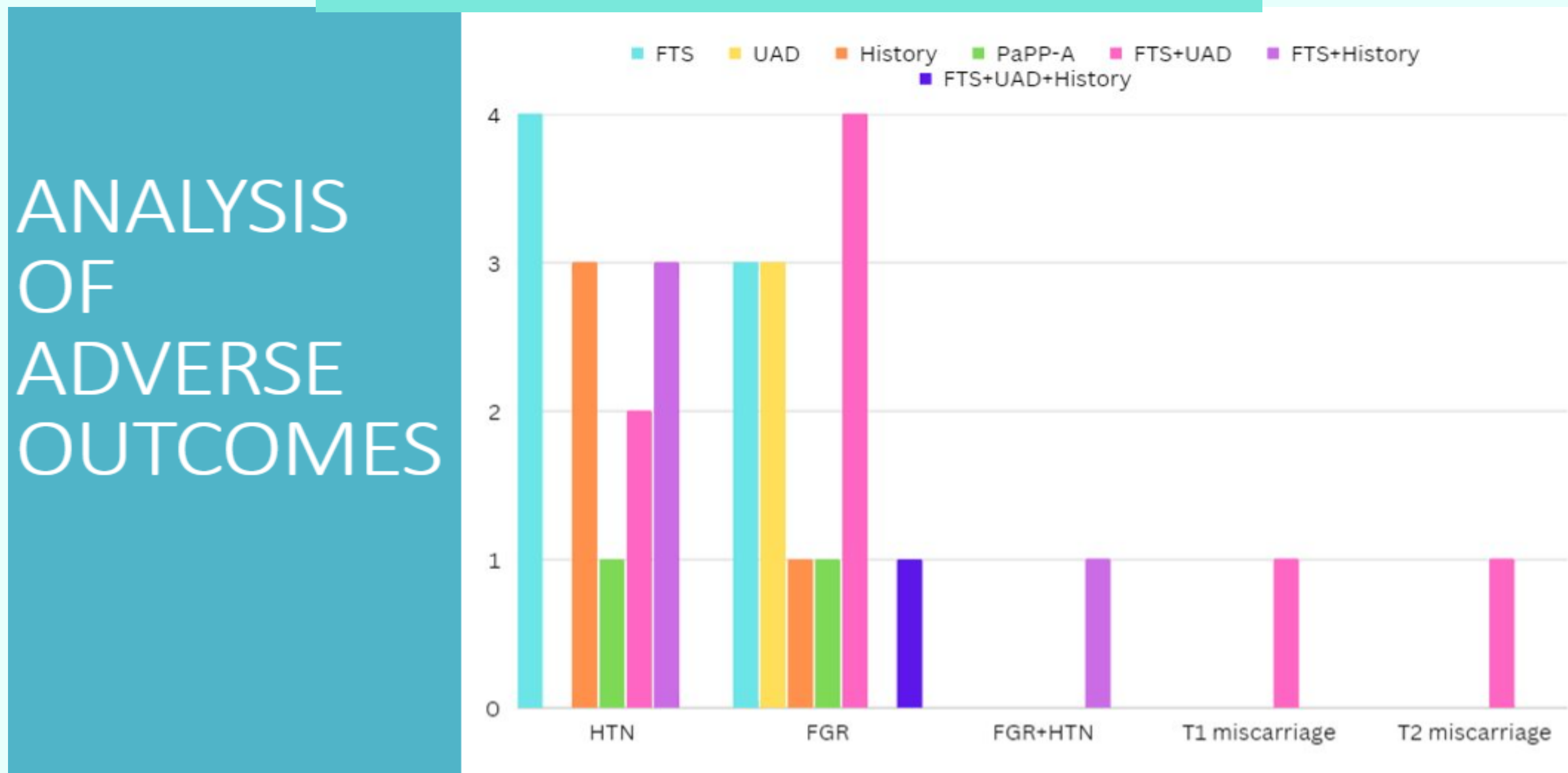
RESULTS

- 286 women were screened, of which 35 women were lost to follow-up and data was analyzed for 251 women

Screening Method	Screen Positivity Rate	Sensitivity
FTS	11.95%	43.5%
UAD	12.75%	26.1%
History	16.73%	19.6%
Low PaPP-A	3.18%	4.3%

- 11.95% women screened positive on FTS** of which **3 women** screened positive for early PE all of whom developed severe preeclampsia <28 weeks with IUFD
- One woman who developed PE<34 weeks, screened negative by all methods but had a history of Covid-19 infection between 16 to 18 weeks of pregnancy
- 12.75% women screened positive on UAD** of which 37.5% developed adverse outcomes.
- 3 patients who were UAD positive but FTS screen negative developed FGR but not PE.
- 16.73% women screened positive by history** of which only 21.43% developed adverse outcomes.
- In 4 women who were screen negative by FTS but screen positive by history, 3 developed PE and 1 woman had FGR. All these 4 women were screen negative by UAD and low PaPP-A as well
- 3.18% women screened positive by low PaPP-A** of which 2 women developed adverse outcomes (1 PE and 1 FGR- screen negative by all other methods)

CONCLUSION



- With respect to early onset PE, FTS had a sensitivity & specificity of **75% & 100%** respectively
- UAD seems to be having a role in prediction of FGR
- Screening by history is still relevant
- 7 women developed late onset PE not picked up by any first trimester screening method which emphasizes the relevance of ongoing screening
- Almost 66.7% of the women in the enhanced FTS group developed various placental complications.

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