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Your BENEFITS in performing a 1st trimester pre-eclampsia screening

- **Early identification** of high risk pregnancies for pre-eclampsia weeks before first clinical symptoms appear
- **Early risk assessment** allows for closer surveillance and in time administration of low dose aspirin (<16 weeks) to significantly reduce the incidence of pre-eclampsia

Your ACCESS to our interactive e-detail

Get more information on pre-eclampsia management throughout pregnancy:

http://prenatal.world-of-biomarkers.com

Pin code: plgf01

References

1. Bujold et al. J Obstet Gynaecol 2010; 116: 402-14
2. Rolnik et al. N Engl J Med. 2017 Jun 28

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First trimester screening for trisomy and pre-eclampsia

3 biomarkers – 2 indications –
1 time point

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Pre-eclampsia is a serious pregnancy related disorder. The only possible cure is the removal of the placenta. Pre-eclampsia can have severe complications for both mother and baby, also on a long-term perspective.

Prevention with low dose aspirin

A meta-analysis showed that the use of low-dose aspirin (75-150 mg/day) can reduce the incidence of pre-eclampsia by about 50% if given before 16 weeks of gestation in high risk patients.[1]

These results have now been confirmed by a double-blinded, placebo-controlled multi-center study (ASPRE trial).[2] 1776 women with singleton pregnancy at high risk (>1 in 100) for preterm pre-eclampsia identified after first trimester combined screening in weeks 11+0 – 13+6 were randomized in two arms, receiving either low-dose aspirin or placebo.

Both arms were compared regarding the number of deliveries with pre-eclampsia before 34 and 37 weeks of gestation, and it was found that:

- Pre-eclampsia <34 weeks occurred in 1.8% of patients in the placebo group vs 0.4% in the aspirin group
  - **Statistically significant reduction of pre-eclampsia by 82%**
- Pre-eclampsia <37 weeks occurred in 4.3% of patients in the placebo group vs 1.6% in the aspirin group
  - **Statistically significant reduction of pre-eclampsia by 62%**

Administration of low-dose aspirin

In the ASPRE trial, low-dose aspirin was administered as follows:[2]

- Only to women identified at high risk for pre-eclampsia after a combined first trimester screening
- 150 mg/day at bedtime
- Start: Time point of screening (11+0 – 13+6) until week 36 or onset of labor

Why to screen for pre-eclampsia?

A combined first trimester screening approach in weeks 11+0 – 13+6 can reliably identify women at high risk for pre-eclampsia in order for a timely and targeted intervention with low-dose aspirin. **Pre-eclampsia screening can be easily integrated into clinical routine pregnancy assessments in first trimester and should be provided to every pregnant woman.**

1 Maternal characteristics including medical and obstetric history

2 **One single maternal blood draw for the determination of Free βhCG, PAPP-A and PlGF on B·R·A·H·M·S KRYPTOR™ compact PLUS**

3 Mean arterial blood pressure (MAP)

4 Nuchal translucency (NT) and Uterine artery pulsatility index (UAPI)

5 Risk assessment with B·R·A·H·M·S Fast Screen pre I plus software to calculate the individual risk to develop pre-eclampsia and fetal T21/18/13

Risk assessment for **fetal trisomies** and **maternal pre-eclampsia** can be performed at the **same time**