

Blood test helps accurate, rapid diagnosis for pre-eclampsia

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A new study published today in *The Lancet*, has found that a simple blood test can help make the diagnosis for a common and potentially fatal pregnancy complication.

The team of scientists from King's College London found that by measuring the concentration of placental growth factor (PIGF) in a woman's blood, doctors were able to diagnose [pre-eclampsia](#) on average two days sooner. This was associated with significant improvements in outcomes for women without causing [health problems](#) for babies.

Lead author Professor Lucy Chappell, NIHR Research Professor in Obstetrics at King's College London said: "For the last hundred years, we have diagnosed pre-eclampsia through measuring blood pressure and checking for protein in a woman's urine. These are relatively imprecise and often quite subjective.

"We knew that monitoring PIGF was an accurate way to help detect the condition but were unsure whether making this tool available to clinicians would lead to better care for women. Now we know that it does."

Between June 2016, and October 2017, the team from King's enrolled 1,035 women with suspected pre-eclampsia to the study from 11 maternity units across the UK. Women were randomly assigned to two groups. One had their PIGF [test](#) results made available to their clinical team, the other did not.

PIGF testing was shown to reduce the average time to pre-eclampsia diagnosis from 4.1 days to 1.9 days and serious complications before birth (such as eclampsia, stroke, and maternal death) from 5% to 4%.

There was no change in the likelihood of complications for the baby, the age at which babies were delivered prematurely or whether they were admitted to a neonatal unit. It was important that this test did not cause more unnecessary cases of preterm birth for babies.

In response to the trial, NHS England has announced that they would be

making the test more widely available across the NHS.

Professor Tony Young, national clinical lead for innovation at NHS England, said: "This innovative blood test, as set out in this new study, helps determine the risks of pre-eclampsia in pregnancy, enabling women to be directed to appropriate care or reduce unnecessary worry more quickly.

"The NHS, with partners in government, will be making this test more widely available across the NHS as part of our plans to ensure as many patients as possible can benefit from world-class health innovations."

Professor Chappell added: "The evidence shows that widespread PIGF testing could save lives and it is fantastic news that NHS England agree. Many tests have come into practice without robust assessment. This time, we have evaluated this new test and shown that it improves care and outcomes for pregnant women and their [babies](#)."

Pre-eclampsia is suspected in around ten per cent of UK pregnancies, affecting approximately 80,000 women annually. If untreated, it can progress to cause complications in the woman, including damage to vital organs, fits and can be fatal for the woman and baby. Globally, [100 women](#) die as a result of the condition every day.

Provided by King's College London

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