

# New Urine Test Can Determine Pregnancy Outcomes For Women At Risk Of Miscarriage

Research has unveiled a new urine test that can help identify if a woman is at risk of miscarriage.

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12 HOURS AGO



Researchers from Nanyang Technological University, Singapore have developed a urine test that will inform pregnant women if they are in danger of having a miscarriage.

A new tested [study in Singapore](#) that is showing promising results to help pregnant women determine if they are showing signs of having a miscarriage. As reported by Physicians Org, the clinician-researchers have developed a 30-minute test that will help expecting mothers gauge if they are in [danger of a miscarriage](#). A miscarriage, which is defined by vaginal bleeding and pains in the stomach, is one of the most common gynecological emergencies that doctors are faced with every day.

Three separate institutions all concluded that one in five expecting women in Singapore shows signs of a possible miscarriage while in their first trimester. Among that group of women, the evidence also showed that one in four women will lose their baby within two weeks after showing signs that their pregnancy is threaten.

Up until now, there has been no concise way of knowing if a pregnant woman will miscarry without using non-invasive measures. Currently, expecting moms must undergo blood work to determine if they are in danger of losing their unborn child. The blood work can take hours before doctors and the mother can get results.

However, the new test developed by NTU scientists shows promise. The doctors will be able to use an innovative surface-enhanced Raman scattering device also known as a SERS chip. The SERS chip will only require just droplets of urine to determine if a pregnant woman is at risk of a miscarriage. The chip is able to direct just a small sample of urine to analyze the molecules to see a pattern that is typical of women who have a miscarriage.

In a control case study, the scientists had a group of 40 pregnant women who all showed threaten signs of miscarriage and the urine test with the SERS chip retrospectively identified the pregnancy outcomes of all participants accurately. The researchers and scientists believe this innovative tool will help doctors help patients who may be at high risk of miscarriage. The non-invasive test is fast and accurate and can benefit women who are not considered high risk and may be in danger of having a spontaneous miscarriage.

Dr. Ku Chee Wai, Division of Obstetrics and Gynaecology, KKH, stated, "This non-invasive toolkit will enable clinicians to predict the risk of a spontaneous miscarriage in women who presents with a threatened miscarriage. Early detection will also allow these pregnant women to receive counseling, medical interventions, or be under close medical management for adverse pregnancy outcomes throughout the rest of their pregnancy. It can also allay the fears and worries of pregnant women who are at low risk of miscarriage and improve their pregnancy experience".