Prenatal test taking guesswork out of foetal abnormalities

A biochemical prenatal screening test developed in Australia is slowly changing attitudes towards early detection of foetal abnormalities.

The pregnancy-associated plasma protein-A (PAPP-A) test has been used clinically around the world since 2000 and, when used in combination with nuchal translucency screening at 10 to 13 weeks' gestation, can improve Down syndrome detection rates by 10–15%.

But according to the test's developer and RCPA associate member Dr Michael Sinosich, it is also useful in determining a pregnancy's future viability.

Scientific Director of Prenatal Testing at the Sonic Clinical Institute, Dr Sinosich said the institute was taking the test one step further than Down syndrome detection, where it was most commonly used.

"Even in the presence of normal ultrasound, you can still identify [with the PAPP-A test] pregnancies that may fail," Dr Sinosich told *PathWay*.

"The biochemistry looks at the placenta; ultrasound looks at the baby – sometimes you get a discordancy. The reality is you can have a placenta without a baby, but you can't have a baby without a placenta, and people are becoming more attuned to this."

Dr Sinosich said more women were learning about the test, and while it was well known to specialists, many general practitioners were unaware of it.

"In reality only about 30% of all pregnancies are screened [using the test], Dr Sinosich said. "It is available more in urban teaching centres and not so much in rural areas."

However, he said the potential benefits of early diagnosis were important.

"Because a fair proportion of early pregnancies fail, if women have this marker available it could save them problems. It can make an emotional difference, but also potentially it could save someone their reproductive function if they were at risk of losing their fallopian tubes."

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Dr Sinosich and the Northern Sydney and Central Coast Area Health Service have taken out a patent on the test, which was licensed by biomedical testing manufacturer Beckman Coulter.