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St George Hospital doctor recognised for pre-eclampsia research

St George Hospital nephrologist Dr Franziska Pettit has been recognised for her research into pre-eclampsia, a potentially life-threatening condition that can affect pregnant women and their unborn babies.

For her research, Dr Pettit was awarded the President's prize for the best clinical research presentation at the recent National Society of Obstetric Medicine of Australia Conference in Freemantle, Western Australia.

Affecting up to 10,000 Australian women every year, pre-eclampsia is a condition which can develop in pregnancy. It affects around five per cent of pregnant women and usually develops in the mother's last three months of pregnancy.

According to Dr Pettit, pre-eclampsia can cause multiple problems, including high blood pressure, kidney failure, leakage of protein into the urine, thinning of the blood and kidney and liver dysfunction.

"Women may experience some, or all of these features, and can become very unwell if left untreated. It may also affect the babies' growth, resulting in a low birth weight, and in occasional cases, the baby may even die. It is potentially a very serious disorder for both mother and baby," Dr Pettit said.

"The cause of pre-eclampsia is not known, however, we believe it arises from an abnormality in the development of the placenta very early in pregnancy.

"Contributing factors for developing pre-eclampsia include being overweight, having high blood pressure before the pregnancy, or diabetes. There is no cure for pre-eclampsia and the only treatment is delivering the baby when it is appropriate to do so."

The focus of Dr Pettit's research has been on early onset pre-eclampsia. Pre-eclampsia can occur at different times during pregnancy, however, when it develops before 34 weeks of pregnancy it is called early onset pre-eclampsia.

"This is challenging as often babies need to be delivered prematurely for a number of reasons. Being delivered prematurely means babies are born small and fewer survive. Babies are also more likely to need intensive care admission; and later in life have a higher risk of illness," Dr Pettit said.

"Our research has shown that many of the babies born to women with early onset pre-eclampsia and who progressed past 34 weeks of pregnancy did very well. Our focus is now on trying to get these pregnancies past 34 weeks whenever possible."

Dr Pettit's research also found that women who develop early onset pre-eclampsia tend to be more affected than those where the disease occurs closer to the end of pregnancy. These women have much higher blood pressure, have more liver abnormalities and are more likely to need care in an intensive care unit.

"This is an important finding as these women need a lot of medical care which requires extra resources, not only in the affected pregnancy, but also in future pregnancies.

"Continued research and looking at new ways to treat pre-eclampsia will lead to finding new therapies and diagnostics which will mean healthier mothers and babies in the future."