

# RESEARCH DIRECTIONS

## Can diclofenac affect blood pressure after having a caesarean?

**Dr Angela Makris from the School of Medicine is investigating the effects of a non-steroidal anti-inflammatory medication (diclofenac) on the blood pressure of women in the post partum period after a caesarean section. This research is funded through a National Health and Medical Research Council Project Grant, and is part of a broad program of Women's Health research being undertaken at the School.**

'After delivery of a baby by caesarean section most women will require pain relief,' says Dr Makris. 'Anti-inflammatory medications, such as diclofenac, form part of that pain treatment. Evidence exists that this medicine may increase the mother's blood pressure and if that was the case this could result in a longer stay in hospital and the need for blood pressure medications and because of the exposure to the risks of high blood pressure such as increased bleeding and stroke.'

The research team will recruit over two hundred women from the obstetric pre-admission clinics at the Royal Prince Alfred, Liverpool and Campbelltown hospitals. Patients will be divided into groups depending on their blood pressure readings and then further divided depending on factors including, their age, body mass index and whether they used artificial reproductive technology. Depending on the group they are in, patients will receive diclofenac or a placebo. Patient's blood pressure will be carefully measured over 24 hours for 5 days using an Ambulatory Blood Pressure Monitor. The team will also collect data about each patient's weight and collect blood samples (at the time of the caesarean operation and on the third day post operation) and information about the patients' experience from pain assessment questionnaires.



Based on analysis of this data, the results of this study is likely to generate important new information that may lead to immediate changes in clinical practice. Health professionals and many child-bearing women may benefit from the findings of this research which and also provide economic benefits from a shorter stay in hospital and less morbidity.

**Project Title:** HYPE: Hypertension and preeclampsia after non-steroidal use for post-partum pain relief; a prospective, stratified, randomised placebo-controlled trial  
**Funding has been set at:** \$170,016

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