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## Anti-inflammatory drugs following hip replacement surgery could harm rather than help

The use of anti-inflammatory drugs following hip replacement surgery could do more harm than good, according to a new study co-coordinated by The George Institute for International Health in association with orthopedic centres throughout Australian and New Zealand.

The results of the study designed to determine the long-term benefits and risks of anti-inflammatory drugs in patients undergoing hip replacement surgery were published today in the British Medical Journal. The study specifically measured the effects of a short post-operative course of anti-inflammatories on the development of 'ectopic' bone formation related pain and disability, six to twelve months after surgery.

"Ectopic bone is abnormal bone that can form in the soft tissues around the operated hip. This occurs in more than one third of all patients in the months after hip replacement surgery," explained, Dr Marlene Fransen Head, Musculoskeletal Program at The George Institute and Principal Investigator of this study. Many surgeons prescribe anti-inflammatory drugs in the immediate post-operative period to avoid this outcome, or simply as part of a pain management strategy. While the researchers found the use of post-operative ibuprofen, a common anti-inflammatory drug, did indeed greatly reduce the risk of ectopic bone formation, patients reported no greater reductions in hip pain or physical disability six to twelve months after surgery, compared with those not taking the drug. However, they also found evidence suggesting there may be an increased risk of major bleeding events in those taking the drug,

"For this reason, our study shows that recommending a routine course of an anti-inflammatory drug following hip replacement surgery, is not justified,"

Chronic osteoarthritis of the hip is common among Australians aged 60 years or older and total hip replacement surgery is a well-established and highly effective treatment.

Whilst joint replacement surgery greatly reduces chronic hip pain and improves physical function in most, residual symptoms are common. Over 900 patients from 20 orthopedic surgery centres across Australia and New Zealand participated in this study, half of whom were allocated to receive ibuprofen, a common anti-inflammatory drug, for 14 days commencing immediately after surgery.

"These results provide further evidence that guidelines for routine clinical care in surgery must be based on clinically important outcomes. Without such evidence, the widespread use of routine anti-inflammatory-based treatment after major orthopaedic surgery may well result in harm rather than benefit," Dr Fransen added.

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## Notes to Editor:

The George Institute for International Health is an internationally-recognised health research body, undertaking high impact research across a broad health landscape. The Institute is centrally involved with Australian community health issues in Aboriginal health, ethnic community health, road safety and injury, mental health, ageing, healthcare access, clinical practice in Australian hospitals and health policy development.

It is also a leader in the clinical trials, health policy and capacity-building areas. Its research has a direct, practical impact on a wide range of healthcare, health policy, safety and socio-cultural issues facing Australians.

The Institute is affiliated with The University of Sydney, Sydney South West Area Health Services, and collaborates in its research with other prestige research institutes, clinical authorities and policy centres around the world.