A Cochrane Review of data relating to about 45,000 patients involved in approximately 350 individual studies has provided an evaluation of the effect you can expect to get if you take commonly used painkillers at specific doses. The review also identifies pain killers for which there is only poor or no reliable evidence. This review will help doctors and patients to make evidence informed decisions of which pain killers to use, and is published in the latest edition of *The Cochrane Library*.

Acute pain occurs when tissue is damaged either by an injury or as a result of surgery. The pain felt after surgery happens because tissues become inflamed, and giving pain killers is a critical component of good patient care. Managing pain well helps keep a patient as comfortable as possible and aids their recovery.

Working at the Oxford Pain Research Unit at Oxford University, Dr Andrew Moore and colleagues analyzed the findings of 35 Cochrane Reviews of randomized trials testing how well different pain killers work when used against postoperative pain.

"Our aim was to bring all this information together, and to report the results for those drugs with reliable evidence about how well they work or any harm they may do in single oral doses," says Moore.

A key finding was that no drug produced high levels of pain relief in all patients. "If the first pain killer a person tries doesn't seem to be working, then a doctor should look to find an alternative reliable drug and see if it is more effective in that individual patient. There are plenty of options that have a solid evidence base," says Moore.

The range of results varies considerably between different pain killers. In some cases such as taking 120mg etoricoxib, or the combination of 500mg paracetamol plus 200mg ibuprofen, over 70% of participants with moderate or severe acute pain who took a single-dose achieved good pain relief. With other drugs, such as 1000mg aspirin and 600mg paracetamol taken on their own, only 35% benefitted. The worst was codeine, with only 14% getting significant pain relief. The period over which pain was relieved also varied, from about two hours to about 20 hours.

"Pain relief doesn't have to be a mystery. There is a body of reliable evidence about how well 46 different drug/dose combinations work against acute pain, but the review also shows there are many examples of drugs for which there is insufficient evidence, and the drugs in question should probably not be used to treat acute pain," says Moore.

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