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#### [Intervention Review]

# Single dose oral tiaprofenic acid for acute postoperative pain in adults

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### ABSTRACT

#### Background

Tiaprofenic acid is a a non-steroidal anti-inflammatory drug (NSAID). It is widely available around the world, with indications for osteoarthritis, rheumatoid arthritis, ankylosing spondylitis, periarticular disorders, and strains and sprains. This review sought to evaluate the efficacy and safety of oral tiaprofenic acid in acute postoperative pain, using clinical studies of patients with established pain, and with outcomes measured primarily over 6 hours using standard methods. This type of study has been used for many decades to establish that drugs have analgesic properties.

#### Objectives

To assess the efficacy of single dose oral tiaprofenic acid in acute postoperative pain, and any associated adverse events.

#### Search methods

We searched Cochrane CENTRAL, MEDLINE, EMBASE and the Oxford Pain Relief Database for studies to June 2009.

#### **Selection criteria**

Randomised, double blind, placebo-controlled trials of single dose orally administered tiaprofenic acid in adults with moderate to severe acute postoperative pain.

#### Data collection and analysis

Two review authors independently assessed trial quality and extracted data. We planned to use area under the "pain relief versus time" curve to derive the proportion of participants with tiaprofenic acid experiencing at least 50% pain relief over 4 to 6 hours, using validated equations; to use number needed to treat to benefit (NNT); the proportion of participants using rescue analgesia over a specified time period; time to use of rescue analgesia; information on adverse events and withdrawals.

#### **Main results**

Not one of eleven studies identified by the searches and examined in detail studied oral tiaprofenic acid against placebo in patients with established postoperative pain and therefore no results are available.

#### Authors' conclusions

In the absence of evidence of efficacy for oral tiaprofenic acid in acute postoperative pain, its use in this indication is not justified at present. Because trials clearly demonstrating analgesic efficacy in the most basic of acute pain studies is lacking, use in other indications should be evaluated carefully. Given the large number of available drugs of this and similar classes which are effective, there is no urgent research agenda for this particular drug.



## PLAIN LANGUAGE SUMMARY

#### Single dose oral tiaprofenic acid for acute postoperative pain in adults

Pain is commonly experienced after surgical procedures. The condition is usually used to test whether or not drugs are effective painkillers in participants with moderate or severe pain. In this case we could find no studies that tested oral tiaprofenic acid against placebo. It is possible that the studies were done, but not reported, because they were used only to register tiaprofenic acid with licensing authorities throughout the world. However, this leaves an important gap in our knowledge, and it means that we cannot be confident about using oral tiaprofenic acid for acute painful conditions.