Over-the-counter analgesics effective for acute postoperative pain

Clinical Question
How effective are single doses of non-prescription (over-the-counter or OTC) oral analgesics for acute postoperative pain?

Bottom Line
Combinations of ibuprofen plus paracetamol worked in 70% of people (NNT* 2), and fast acting ibuprofen formulations 200 mg and 400 mg, ibuprofen 200 mg plus caffeine 100 mg, and diclofenac potassium 50 mg worked in over 50% of people (NNT close to 2). Dipyrrone 500 mg, which is available OTC in many parts of the world, also worked in about 50% of people. Paracetamol plus aspirin at various doses worked in 11% to 43% of people (NNT 3 or above). An important finding was that low doses of some medicines in fast acting formulations were among the best. Taking painkillers with food might reduce how well they work. There were fewer side effects for people taking ibuprofen plus paracetamol than those taking placebo. The quality of the evidence was good.

*NNT = number needed to treat to benefit one individual.

Caveat
There was no information on many of the commonly available combinations containing low doses of codeine. The results for side effects might be different if the painkillers were taken for more than a few days.

Context
OTC analgesics are used frequently. They are available in various brands, package sizes, formulations, and dose. They can be used for a range of different types of pain, but this overview reports on how well they work for acute postoperative pain.

Cochrane Systematic Review

PEARLS No. 506, April 2016, written by Brian R McAvoy. C44