

# Paracetamol and non-steroidal anti-inflammatory

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### Paracetamol and non-steroidal anti-inflammatory drugs

Paracetamol was first synthesised in 1878 by Morse and was introduced for medical usage in 1883. However, because of misinterpretation of its safety profile, its use was limited until the 1950s, when the chemically similar, and until then preferred analgesic, phenacetin was withdrawn owing to renal toxicity. Paracetamol is probably now the most commonly used drug worldwide; it is available over the counter, used in almost all ages and forms step 1 of the WHO analgesic ladder. It is first-line treatment for pyrexia and pain, plays an important role in multimodal analgesia and is considered to possess a generally excellent safety profile, except in significant overdose, with only a few drug interactions. Oral and rectal administration can produce analgesia within 40 minutes, with maximal effect at range 63–89% for oral and 24–98% for rectally administered preparations) the timing of onset can be unpredictable. The introduction of its intravenously administered preparation within the last decade overcomes this issue. NSAIDs are used in the treatment of acute pain for their opioid-sparing effects, as part of a multimodal analgesic regimen. However, it is important to recognise that long-term usage and an increase in prescription may be associated with significant morbidities. Increased risk of perioperative bleeding, gastrointestinal bleeding and ulceration, thrombotic events such as myocardial infarction and stroke, renal impairment, fluid retention and exacerbation of asthma are some of the side effects of NSAIDs, suggesting cautious usage. Intravenous opioids administered as patient-controlled analgesia (PCA) for pain relief is a useful technique. The patient is trained to give a bolus dose of drug by pressing a control button on a machine, the functions of which have been regulated by medical staff. The strength, frequency and total dose of drug in a given time are all limited by computer. This method is popular with patients as they have control and prevents delays in administration of doses. Paracetamol and non-steroidal anti-inflammatory drugs

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