



NSAIDs are stronger pain medications than opioids

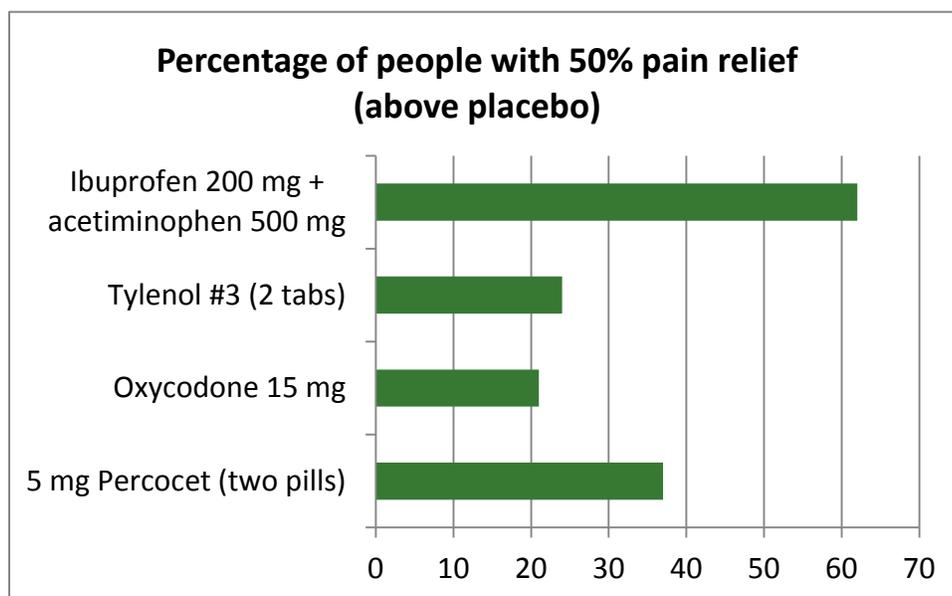
A Summary of Evidence

Several Cochrane Reviews have looked at the effectiveness of pain relievers. Interestingly, the combination of 200 mg of ibuprofen and 500 mg of acetaminophen is one of the strongest pain reliever combinations available. It is clearly more efficacious than any of the opioids used alone or in combination with acetaminophen.

A recent review in the Journal of the American Dental Association also came to the conclusion that ibuprofen and acetaminophen combination is the best treatment of dental pain. (Moore, 2013)

Below is a summary of Cochrane reviews that have looked at different medications for the treatment of pain:

- Naproxen for postop pain, 2011. For naproxen the number needed for treatment (**NNT**) for at least 50% pain relief over four to six hours was **2.7** (95% CI 2.3 to 3.2). (C Derry & Derry, 2009)
- Oxycodone for postop pain, 2010: This updated review includes 20 studies, with 2641 participants. For oxycodone 15 mg there is a NNT for at least 50% pain relief was **4.6** (95% Confidence Interval 2.9 to 11). For oxycodone 10 mg plus paracetamol 650 mg, **the NNT was 2.7** (2.4 to 3.1). (Gaskell, Derry, Moore, & McQuay, 2009)
- Ibuprofen plus acetaminophen for post-op pain. For ibuprofen 200 mg plus acetaminophen 500 mg there is a **NNT of 1.6** (1.5 to 1.8). (CJ Derry, Derry, & Moore, 2013)
- Treatment of renal colic, 2009: Twenty trials from nine countries with a total of 1613 participants were identified. The studies showed that NSAIDs provided pain relief equal to opioids but with less side effects. The authors concluded that: "Both NSAIDs and opioids can provide effective analgesia in acute renal colic. Opioids are associated with a higher incidence of adverse events, particularly vomiting." (Holdgate & Pollock, 2004)



For more information, visit nsc.org/rxpainkillers

Implications for Practice

Based on this evidence, Dr. Don Teater notes the following implications for practice:

- The severity of the pain should not be a consideration when choosing treatment. With no contraindications, ibuprofen and acetaminophen should always be used first.
- If absolutely necessary, an opioid could be used for several days immediately after surgery or an injury. If the patient continues to request more opioids after that period, they should be reevaluated by the physician to determine the cause of the request. Are there complications causing ongoing pain or is the request because of the emotional or psychological state of the patient.

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