POSTOPERATIVE PAIN

The following study suggests that low dose ketoprofen is effective in treating certain types of postoperative dental pain - "Pharmacokinetics and efficacy of low-dose ketoprofen in postoperative dental pain" (Clin Drug Investig. 1998;15(4):279-84).

ABSTRACT: "A double-blind, randomised trial was carried out to investigate the relationship between efficacy and various pharmacokinetic variables after single doses of racemic ketoprofen 12.5 and 25mg in patients with postoperative pain after third molar surgery over a 4-hour investigation period. Serial venous blood samples were obtained at 0, 0.25, 0.5, 0.75, 1, 1.5, 2, 3 and 4 hours after administration for subsequent determination of R(-) and S(+) ketoprofen. The relationship between the R(-) and S(+) ketoprofen concentrations and pain experience was summarised for each patient by the slope of the regression line for that individual. There was no significant difference ($p > 0.05$) between the two doses of ketoprofen for any of the efficacy measures. Peak plasma concentrations of both R(-) and S(+) ketoprofen were observed between 60 and 90 minutes after dosage. A significant negative correlation ($p < 0.002$) was observed between the decrease in pain scores and plasma concentrations of both R(-) and S(+) ketoprofen after each dose. However, the amount of variability in each patient's response makes it difficult to identify a causal relationship between these parameters. Low doses of ketoprofen provide satisfactory pain relief in the early postoperative period after third molar surgery. Efficacy of this analgesic does not appear to be dose related or directly related to plasma concentrations of either R(-) or S(+) enantiomers." PMID: 18370482

This study evaluates lidocaine as a single local anesthetic - "Comparison of 1% and 2% lidocaine hydrochloride used as single local anesthetic: effect on postoperative pain course after oral soft tissue surgery" (Methods Find Exp Clin Pharmacol. 1999 Sep;21(7):505-10).

ABSTRACT: "It is known that some local anesthetics may cause pain when the initial local anesthetic effect disappears. The aim of this trial was to compare the postoperative pain intensities after infiltration of plain lidocaine 1% and 2% used in gingivectomies. The trial was done as a controlled, randomized, double-blind, parallel group study involving 117 patients with mean age 48 years (range 29-71 years) allocated to two treatment groups. There was no statistically significant difference between the mean postoperative pain courses of lidocaine 1% and 2% after gingivectomies during an 11-h observation period. A numerical difference was seen from 7 to 11 h in favor of lidocaine 1%. There were more patients experiencing no pain, but more patients reporting higher pain scores in the lidocaine 2% group than in the lidocaine 1% group. These differences were not statistically significant. It can be concluded that there is apparently no difference between lidocaine 1% and 2% with respect to postoperative pain experience when using gingivectomy as a pain model." PMID: 10544396

With our state of the art compounding lab, and pharmaceutical knowledge and experience, we can compound ketoprofen and lidocaine into an oral adhesive paste that can be applied directly to the site of pain. This may be a suitable alternative for patients who are not able to take/tolerate oral NSAIDs .

An example of how you might prescribe follows:

COMPOUNDED MEDICATION
Ketoprofen 2% / Lidocaine 2% **Oral Adhesive Paste** 15gm Apply TID