

ANALGESICS FOR ACUTE OROFACIAL PAIN

The choice of the best analgesic to help manage pain from a dental emergency is influenced by a number of factors. These include:

- Severity of the pain

Clinical judgment is required to determine the patient's anticipated level of pain following the management of the dental emergency. A very arbitrary and subjective classification is: mild-moderate, moderate-severe, or severe.

- Medical history of the patient

Factors which would contraindicate non-steroidal anti-inflammatory drugs (NSAIDs) would include gastric ulceration, bleeding concerns, severe asthma, late-term pregnancy and significant renal disease. Avoid NSAIDs in patients taking drugs which can interact, such as lithium, anticoagulants or antineoplastic doses of methotrexate. NSAIDs should only be used for 4 days or less if the patient is taking an anti-hypertensive of the classes angiotensin-converting-enzyme inhibitors, diuretics or beta-blockers.

Significant liver disease would require a reduction in doses of any analgesic selected.

- Known allergies

Allergy to ASA or any NSAID rules out use of any other NSAID. In particular, ASA-induced asthma rules out use of any NSAID.

A true allergy to codeine contraindicates its use as well as that of oxycodone (as found in Percocet™).

- Consider these general guidelines:

- Eliminate the source of pain when possible.
- Individualize regimens based on the patient's level of pain and medical history.
- Maximize the non-opioid (NSAID or acetaminophen) before adding the opioid.
- Avoid chronic use of any analgesic.
- Reduce the dose in the elderly.

With the above information, the dentist can then proceed to follow an algorithm, based on the answers to the following questions, to determine an appropriate analgesic. Dosing regimens are listed following the algorithm.

Questions to consider to guide pain management

The following questions can help guide pain management. The same questions are shown in an algorithm format, on the next page.

1) Is pain estimated to be mild-to-moderate?

If yes, recommend acetaminophen 500 to 1,000 mg. This can be accomplished by recommending 1 to 2 tablets of analgesics such as “Extra-strength” formulations of acetaminophen, or 2 to 3 tablets of regular strength acetaminophen. For children, acetaminophen in a dose of 10 -15 mg/kg every 4 hours is the first choice.

2) Is pain estimated to be moderate-to-severe?

a. Is the patient in good health with no contraindications to NSAIDs?

If yes, recommend an NSAID, such as ibuprofen 400 mg, every 4 hours. Alternatively, it is reasonable to prescribe any one of flurbiprofen, diflunisal, naproxen, ketorolac, ketoprofen, floctafenine, etodolac, or celecoxib.

b. Does the patient have an allergy to ASA or other NSAID, or have a contraindication to NSAIDs, such as gastric ulceration, severe asthma, etc?

If yes, recommend acetaminophen with codeine.

c. Is the patient a child?

If yes, ibuprofen 10 mg/kg every 6 to 8 hours can be considered. Alternatively, codeine at 0.5 – 1 mg/kg every 4 to 6 hours can be added to either acetaminophen or ibuprofen.

3) Is pain estimated to be severe?

If yes, there are several options to consider:

- a. Consider using bupivacaine to gain a longer duration of local anesthesia.
- b. Consider higher doses of an NSAID, such as ibuprofen 600 mg, if there are no contraindications.
- c. Add codeine, 30 to 60 mg, to the NSAID or acetaminophen.
- d. Use oxycodone with acetaminophen (such as Percocet™).

4) Is the patient pregnant?

- a. Acetaminophen can be used for the short-term.
- b. Codeine or oxycodone can be used in therapeutic doses for the short-term.
- c. NSAIDs should be avoided late in pregnancy.

ALGORITHM FOR ANALGESIC USE

If mild to moderate postoperative pain is expected

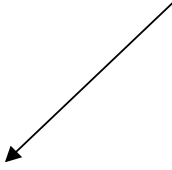


Acetaminophen



**If 1,000 mg of acetaminophen is, or will be, insufficient
(i.e. it is moderate to severe pain)**

If no contraindication



NSAID



If more analgesia is required



**Add codeine to NSAID, acetaminophen or ASA
or
add oxycodone with acetaminophen or ASA**

If NSAID contraindicated



**Add codeine to acetaminophen
or
add oxycodone with acetaminophen**

The above algorithm should be considered to manage acute orofacial pain in the adult.

DOSING REGIMENS FOR OROFACIAL PAIN

ADULT

<u>DRUG (Examples of brand name)</u>	<u>Dose (mg)</u>	<u>Frequency</u>	<u>Daily maximum (mg)</u>
acetaminophen (Tylenol)	500 – 1,000	q4-6h	4,000
acetylsalicylic acid (Aspirin)	325 - 1000	q4-6h	4,000
ibuprofen (Advil, Motrin)	400	q4-6h	2,400
flurbiprofen (Ansaid)	50	q4-6h	300
diflunisal (Dolobid)	500	q12h	1,500
naproxen (Anaprox, Naprosyn)	275/250	q6-8h	1,375
ketorolac (Toradol)	10	q4-6h	40
ketoprofen (Orudis)	25 – 50	q6-8h	300
floctafenine (Idarac)	200 - 400	q6-8h	1,200
etodolac (Ultradol)	200 - 400	q6-8h	1,200
celecoxib (Celebrex)	200	q12h	400
codeine (with acetaminophen or an NSAID)	30 - 60	q4-6h	--
oxycodone (in Percodan, Percocet)	5 - 10	q4-6h	--

PEDIATRIC

acetaminophen (Tylenol, Tempra)	10 -15 mg/kg	q4-6h	65 mg/kg
ibuprofen (Children's Advil) :	10 mg/kg	q6-8h	40 mg/kg
codeine	0.5 – 1 mg/kg	q4-6h	3 mg/kg

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