

## Redwood Community Health Coalition (RCHC)

### DENTAL GUIDELINES ON ACUTE PAIN MANAGEMENT

## General Guidelines

---

These guidelines address the use of pain medication for the treatment of acute dental pain and are intended to supplement and not replace the individual prescriber's clinical judgement

#### A Provider Should Always:

- Conduct and document a thorough **medical and dental history** of the patient.
- Verify **current medications** and any allergies.
- **Check** the patient's record in EHR and CURES for any **history of substance abuse or psychiatric diagnosis**. If warranted contact pharmacy for patient history
- **Use non-steroidal anti-inflammatory drugs** as first line analgesic therapy unless contraindicated.
- When an extensive surgical procedure is planned, optimal serum levels of an **NSAID** should be established either **preoperatively** or before patient discharge, and while tissues remain anesthetized
- Consider the use of **local anesthesia for immediate relief of pain (Bupivacaine)**
- If an **opioid** is prescribed it should be **for a short period** of time and for conditions typically associated with **severe pain**
- Long acting or **extended release opioids are contraindicated** for acute procedural pain
- **Be aware of concurrent medications** and any drug-drug interactions (antidepressants)
- Patients reporting prolonged pain especially with no evidence of oral pathology should be referred to appropriate medical provider
- **Opioids should not be prescribed in combination with benzodiazepines or other centrally acting sedating medications**
- **Refer patients who request opioids beyond the normal** expected recovery period.
- **A patient who raises the suspicion** of the dental provider should be **referred** back to their medical provider for prescription
- The dental provider should **coordinate drug therapy with other clinicians** in any patients with a history of substance use disorder or who are at high risk for aberrant drug behaviors
- It is not proper to prescribe opioids without a **face to face evaluation of with the patient**. Do not prescribe opioids to patients over the phone
- **Be aware of state and federal laws** and regulations governing the prescribing of opioid medication

- **Be suspicious of patients** who ask for specific drugs or report that their medication was “lost” “stolen” or “dropped in the sink”
- Patients between 18 to 25 years of age are at increased risk of abusing prescription drugs, so patients in this age range should be screened carefully

## NSAIDs

---

The following information on NSAIDs has been adapted from “Drug Therapy in Dental Practice: Non-opioid and Opioid Analgesics, Becker D, Phero J, *Anesth Prog* 52: 140-149.

NSAIDs provide excellent analgesia for mild to moderate pain. They are particularly useful in the initial management of pain that has an inflammatory component. This includes pain associated with musculoskeletal trauma and dentistry.

The antiplatelet effect of conventional NSAIDs is a consideration following surgical procedures, but aspirin is the only NSAID that significantly prolongs bleeding time. This is because aspirin’s antiplatelet action is irreversible, lasting the lifespan of the platelet (10–14 days). Other NSAIDs bind weakly and reversibly to platelet cyclooxygenases, which results in their mild antiplatelet influence being lost after drug elimination. Although these agents all prolong bleeding times to varying degrees, this does not correlate with clinical bleeding. Whether the antiplatelet influences of low-dose aspirin or other NSAIDs increases postsurgical bleeding to a significant degree remains unsettled, because case reports and clinical studies are at odds.

All NSAIDs have greater potency as analgesics and antipyretics than as anti-inflammatory agents.

The analgesic dose response curves for NSAIDs and acetaminophen demonstrate an upper limit or ceiling effect. **A point is reached at which increasing the dose further provides no improvement in pain relief.** For acetaminophen, this ceiling response occurs at approximately 1000 mg, and for ibuprofen, 400 mg.

**A ceiling for their anti-inflammatory response cannot be ascertained because at higher dosages, side effects become prohibitive.** Because higher NSAID doses are typically required to suppress inflammation than to provide analgesia, many NSAIDs are marketed in several dosages, ie. ibuprofen is available in dosages ranging from 200 to 800 mg.

**When prescribing a NSAID, the practitioner should select the lower dose range for non-inflammatory pain and reserve the higher dosages for when inflammation and swelling are an issue.**

## **Ibuprofen**

**Ibuprofen has one of the better safety profiles. Considering its low cost and side effect profile, ibuprofen is a logical first-line agent.** It produces GI symptoms in >3% of patients treated and its antiplatelet activity is considerably less than that of aspirin and most other NSAIDs. There has been recent confirmation that ibuprofen is unique among NSAIDs in antagonizing the influence of aspirin's antiplatelet effect.

Avoid ibuprofen in pregnancy, and in patients taking aspirin for coronary artery disease or for prevention of transient ischemic attacks or stroke. **Maximum daily dose ibuprofen is 2,400 mg /day**

## **Acetaminophen**

The action of acetaminophen is poorly defined, but it is believed to interrupt the influence of prostaglandins within central nervous system pathways. Acetaminophen is approximately as active as aspirin in inhibiting prostaglandin synthesis within the central nervous system, but has little influence in peripheral tissues. This is one of several explanations for its lacking anti-inflammatory efficacy and sharing none of the peripheral side effects common to NSAIDs.

**As an analgesic and antipyretic, however, acetaminophen is equal in potency and efficacy to aspirin, achieving its analgesic ceiling at 1000 mg**

**The major adverse effect of acetaminophen is hepatotoxicity.** This is attributed to a metabolite that is not adequately conjugated following acute doses of 10–15 g (150–250 mg/kg). The conjugate for this toxic metabolite is provided by glycogen, and a lower dose of acetaminophen may be toxic for patients having depleted glycogen stores, such as are associated with dieting and anorexia, and for patients suffering primary liver dysfunction or receiving hepatotoxic medications.

**The total dose of acetaminophen should not exceed 4,000mg/day in adults**

**Patients suspected of chronic alcoholism should limit their daily acetaminophen intake to 2 g, rather than the normal daily maximum of 4 g.**

Acetaminophen has been shown to be synergistic with NSAIDs with the efficacy of low dose opioids

### **Contraindications to NSAIDs:**

- **Patients having a current history of nephropathy/renal compromise** - In the healthy patient, nephrotoxicity attributed to NSAIDs requires high doses for extended periods. However, a patient with compromised renal function relies more heavily on prostaglandins for adequate function, and acute renal failure can occur within 24 hours of NSAID administration.
- **Erosive or ulcerative conditions of the GI mucosa**

- **Anticoagulant therapy/bleeding disorder** - This is because gastric injury may result in extensive bleeding, not because of the added antiplatelet influences.
- **Hemorrhagic disorders**
- **Intolerance or allergy to any NSAID**
- **Pregnancy** - In the developing fetus, prostaglandins maintain patency of the ductus arteriosus during fetal development, so they should not be inhibited. In all cases in which NSAIDs are contraindicated, acetaminophen is the conventional non-opioid alternative. (11)
- NSAIDs should never be taken together nor combined with aspirin. An allergy /intolerance to aspirin constitutes a contraindication to all NSAIDs

## OPIOID ANALGESICS

---

The dispensing of opioids is associated with significant risk of harm, including sedation, altered mental status and respiratory depression and arrest as well as the risk for misuse, diversion and substance use disorders.

### What Is Drug Diversion?

Drug diversion is the illegal distribution or abuse of prescription drugs for purposes not intended by the prescriber (for example: recreation, addiction, or financial gain). The diversion of prescription drugs may occur at any time as prescription drugs are distributed from the manufacturer to chain store distribution centers to pharmacies and clinical settings and ultimately to the patient.

Drug diversion can result in drug addictions, overdoses, drug-related emergency room visits, and death. According to the Centers for Disease Control and Prevention (CDC), since 2000, the age-adjusted drug poisoning death rate more than doubled, from 6.2 per 100,000 in 2000 to 13.1 per 100,000 in 2012. In addition to these disturbing statistics, nonmedical use of pharmaceuticals accounted for a 400 percent increase in substance abuse admissions from 1998 through 2008. That figure includes a threefold increase in treatment for opioid pain relievers specifically. (2)

The data available from the National Survey on Drug Use and Health indicate that approximately 4.5 million people 12 years or older reported nonmedical use of pain relievers in the past month, including taking more than prescribed, combining them with other drugs or alcohol, taking opioids for reasons other than pain relief, lending their medication to others, borrowing or diverting from others, having multiple requests for early refills, reporting medications lost or stolen, and obtaining medications from multiple sources. Opioids are the most prescribed medication of any drug category in the United States, exceeding 250 million prescriptions annually. Results from a 2014 analysis indicate that emergency department visits related to opioid overdose quadrupled over the past 2 decades (3)

Dental providers have the responsibility to treat pain while minimizing potential adverse effects to the patient which includes an understanding the risks surrounding the abuse of opioids

Assess for risk of opioid abuse diversion, using a standardized tool if needed (ORT). If patient is at high risk, consider baseline urine toxicology screen, use of non-opioids modalities to treat pain.

## THERAPEUTIC USE OF OPIOIDS

---

The following information on Opioid analgesics has been adapted from: Drug Therapy in Dental Practice: Non-opioid and Opioid Analgesics. Becker DE Anesth Prog. 2005 Winter; 52(4): 140–149.

Unlike the non-opioids, which exhibit a ceiling effect, the analgesic response to opioids continues to improve as their dose is increased. Although their analgesic efficacy is unlimited, side effects often preclude the use of doses adequate to completely relieve severe pain. These side effects include sedation, respiratory depression, dependence, nausea, miosis, and constipation. Following prolonged use, patients develop tolerance to most opioid effects.

Patients and practitioners are often concerned with the potential for addiction, which may limit prescribing and use, leading to inadequate management of pain. This can be attributed to confusion regarding the concepts of “drug dependence” and “drug addiction.” Patients consuming opioids regularly for more than a week may develop some degree of dependence. This may require gradual tapering of the dosage to avoid withdrawal symptoms. However, drugs do not produce addiction. This is a compulsive pattern of behavior in which an individual continues to seek the drug for effects they perceive as pleasurable and not for legitimate medical conditions. Addictive behavior is a psychiatric condition that can be reinforced by a particular drug, but it is not a pharmacodynamic property. Obviously, opioids must be prescribed cautiously for patients who demonstrate addictive personality.

Genetic predisposition for biotransformation of opioids can lead to poor analgesia in certain patients. Approximately 7% of the Caucasian population metabolizes codeine and hydrocodone poorly, because they have inherited 2 nonfunctional alleles for cytochrome P450 CYP2D6. In these individuals, analgesia resulting from codeine, oxycodone, or hydrocodone will be less than expected with the general population.

**In general, dose selection for an elderly patient should be cautious, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy.**

### Drug Interactions:

The influence of certain antidepressants on the effectiveness of codeine and its derivatives has significant clinical implications. Several of the selective serotonin reuptake inhibitor antidepressants can hinder the demethylation of codeine and its derivatives. This is established for fluoxetine (Prozac) and paroxetine (Paxil), but appears less likely with other agents of this class. Patients taking these antidepressants may experience reduced levels of analgesia from these opioids.

Opioids should not be prescribed in combination with benzodiazepines or other centrally acting sedating medications

## Tramadol

Tramadol is a centrally-acting analgesic with binary action. It is not classified as a controlled substance in the United States. The parent drug inhibits the reuptake of norepinephrine and serotonin. This resembles the action of tricyclic antidepressants and potentiates descending inhibitory pathways. This action has proven efficacy in the management of chronic pain. However, tramadol's benefit in acute postoperative pain management is not as well defined.

Tramadol is marketed as an effective and safe analgesic for moderate to moderately severe pain. Nausea, vomiting, and dizziness may occur with the use of tramadol. It should be used with caution in patients with a history of seizure disorder. Tramadol, similar to opioids, is meant for short term use only, and is not recommended for patients with a tendency to opioid abuse or dependence

## ANALGESIC REGIMENS

---

Mild to moderate pain can frequently be managed effectively by first using optimal doses of non-opioids, ibuprofen 400–800 mg, or acetaminophen. Although it is unwise to combine NSAIDs, the addition of acetaminophen to an NSAID is an option, as acetaminophen has a different site of analgesic action. Regardless of pain severity, one should seek to optimize dosages of these agents, and then, if necessary, add an opioid to the regimen. This practice will generally reduce the amount of opioid required, sometimes to only a fraction of the maximum doses.

Careful selection of an effective analgesic regimen based on the type and amount of pain the patient is expected to have can prevent the stress and anxiety associated with breakthrough pain. When analgesics fail, it is not unusual for patients to go to desperate lengths to seek relief. The clinician can and should develop a variety of effective, safe analgesic regimens based on estimates of anticipated pain intensity that use sound pharmacological principles. The following are key features for the proper management of acute postoperative pain:

1. Patients benefit from receiving optimal NSAID doses given on regular, “clock-based” time intervals. These agents are effective and relatively safe, and reduce the need for opioids. In situations where pain can be anticipated, the NSAID may be optimized by pre-operative administration and by continuing to dose the NSAID on a regular schedule to minimize pain and inflammation.
2. Acetaminophen's site of action differs from that of NSAIDs. Therefore, acetaminophen's analgesic effect is considered synergistic when combined with NSAIDs.
3. Once the dose of NSAID and/or acetaminophen has been optimized, but pain persists, opioid use may be a consideration. A commercially available combination product containing opioid and acetaminophen may be a good option, and is easy to prescribe. When prescribing combination opioid and acetaminophen analgesic products or acetaminophen alone, the practitioner must caution the patient not to exceed 4 g of acetaminophen per day because of concerns with hepatic injury.

4. As opioids have no ceiling dose, there are some situations where opioid dosing is better done with the opioid prescribed separately. This permits increasing the opioid to the needed analgesic dose and decreases concern for acetaminophen toxicity
5. Regarding opioid prescribing - prescribe no more than the number of doses needed based on the usual duration of pain severe enough to require opioids for that condition. Post-surgery prescribing of quantities expected to last more than a few days may actually be harmful. Prolonged severe pain after surgery is often indicative of poor healing or infection and In this case a post op visit would be suggested to investigate the cause of pain

## Two Approaches for Managing Pain

---

### Option 1

**Step 1** – Mild to Moderate Pain (these should be prescribed continuously not prn):

**Ibuprofen:** 400 mg q 4 h **or** 600 mg q 6 h (max is 2,400 mg /day)

**and/or**

**APAP:** 500 mg q 4 h **or** 1000 mg 4 times a day (max 4000 mg/day)

**Step 2** - If the above proves inadequate or the pain is too severe, step 2 can be added, but it should not replace Step 1

Add:

**Oxycodone:** 5-10 mg 1-2 tab q4h prn **or**

**Tramadol:** 50 mg 1 tab q4h prn

**or**

**If no APAP in step 1 - can add one of the following;**

**Hydrocodone/APAP (Norco):** 5/325, 1 tab q 6 h: fixed interval 24 – 48 hours (max 8 tab/day)

**Oxycodone/APAP (Percocet):** 5/325, 1 tab q 6 h: fixed interval 24 – 48 hours (max 8 tab/day)

**Tramadol/APAP:** 37.5/325, 2 tab q 6 h; fixed interval 24-48 hours (max 12/day)

Adapted from: Drug Therapy in Dental Practice: Non-opioid and Opioid Analgesics. Becker DE Anesth Prog. 2005 Winter; 52(4): 140–149.

### Option 2

**Mild:** Ibuprofen 400 mg q 4-6 hours prn for pain

**Mild to Moderate:** Ibuprofen 400 - 600 mg q 6 hours; fixed interval for 24 hours. Then ibuprofen



400 mg prn for pain

**Moderate to Severe:** Ibuprofen 400 – 600 mg with APAP 500 mg q 6 hours: fixed interval 24 hours. Then Ibuprofen 400-600 mg with APAP 500 mg q 6 hours, prn for pain

**Severe:** Ibuprofen 400 - 600 mg **with** APAP 325 mg/Hydrocodone Bitartrate 5 mg (Norco 5/325) q 6 hours: fixed interval 24 – 48 hours (max 8 tab). Then Ibuprofen 400 - 600 mg with APAP 500 mg q 6 hours, prn for pain

**Note: Patients should be warned to avoid APAP in other medications**

**Maximum daily dose of APAP is 4,000 mg /day**

**Maximum daily dose ibuprofen is 2,400 mg /day**

Adapted from: Combining ibuprofen and acetaminophen for acute pain management after third-molar extractions  
Translating clinical research to dental practice Paul A. Moore, DMD, PhD, MPH; Elliot V. Hersh, DMD, MS, P  
August 2013 *JADA* 2013;144(8):898-908.

## Cures Protocol

---

The **Controlled Substance Utilization Review and Evaluation System (CURES)** stores Schedule II, III, and IV controlled substance prescription information reported as dispensed in California. CURES contains the following information: patient name, patient date of birth, patient address, prescriber name, prescriber DEA number, pharmacy name, pharmacy license number, date prescription was dispensed, prescription number, drug name, drug quantity and strength, and number of refills remaining.

Prescribers authorized to prescribe Schedule II, III, or IV controlled substances, and pharmacists, may access CURES data for patient care purposes.

Data contained in CURES is reported to the DOJ by pharmacies and direct dispensers.

The CURES 2.0 system also provides clinicians a messaging capability to the patient's other prescribers within the secure CURES 2.0 environment.

CURES 2.0 patient safety alerts provide post-prescription updates of patient medicinal therapy levels. These messages alert clinicians when their patient's aggregate prescription level exceeds certain thresholds. Alerts are presented at the following therapy thresholds:

1. Patient is currently prescribed more than 100 morphine milligram equivalents per day
2. Patient has obtained prescriptions from 6 or more prescribers or 6 or more pharmacies during last 6 months
3. Patient is currently prescribed more than 40 morphine milligram equivalents of methadone daily
4. Patient is currently prescribed opioids more than 90 consecutive days
5. Patient is currently prescribed both benzodiazepines and opioids



## FOR PHP MANAGED CARE PATIENTS

- New opioid pill limit is 30 pills in 90 days
- A "new opioid user" is someone who has not had a prescription for an opioid in the previous 90 days. People on long acting opioids already who now are getting a NEW short acting prescription will also be limited.
- A TAR will be requested by PHP at the time of the 2<sup>nd</sup> refill for 30 tabs in less than 90 days. This TAR will be relatively easy to get and should be filled out and submitted by the pharmacy. The paperwork should be sent to the provider for diagnosis and signature. A 3<sup>rd</sup> one will be very challenging to get within 90 days.

## Prescription List

---

### Option 1

**Step 1** – Mild to Moderate Pain (these should be prescribed continuously not prn):

**Ibuprofen:** 400 mg q 4 h **or** 600 mg q 6 h (max is 2,400 mg /day)

**and/or**

**APAP:** 500 mg q 4 h **or** 1000 mg 4 times a day (max 4000 mg/day)

**Step 2** - If the above proves inadequate or the pain is too severe, step 2 can be added, but it should not replace Step 1

Add:

**Oxycodone:** 5-10 mg 1-2 tab q4h prn **or**

**Tramadol:** 50 mg 1 tab q4h prn

**or**

**If no APAP in step 1 - can add one of the following;**

**Hydrocodone/APAP (Norco):** 5/325, 1 tab q 6 h: fixed interval 24 – 48 hours (max 8 tab/day)

**Oxycodone/APAP (Percocet):** 5/325, 1 tab q 6 h: fixed interval 24 – 48 hours (max 8 tab/day)

**Tramadol/APAP:** 37.5/325, 2 tab q 6 h; fixed interval 24-48 hours (max 12/day)

## **Option 2**

**Mild:** Ibuprofen 400 mg q 4-6 hours prn for pain

**Mild to Moderate:** Ibuprofen 400 - 600 mg q 6 hours; fixed interval for 24 hours. Then ibuprofen 400 mg prn for pain

**Moderate to Severe:** Ibuprofen 400 – 600 mg with APAP 500 mg q 6 hours: fixed interval 24 hours. Then Ibuprofen 400-600 mg with APAP 500 mg q 6 hours, prn for pain

**Severe:** Ibuprofen 400 - 600 mg **with** APAP 325 mg/Hydrocodone Bitartrate 5 mg (Norco 5/325) q 6 hours: fixed interval 24 – 48 hours (max 8 tab). Then Ibuprofen 400 - 600 mg with APAP 500 mg q 6 hours, prn for pain

**Note: Patients should be warned to avoid APAP in other medications**

**Maximum daily dose of APAP is 4,000 mg /day**

**Maximum daily dose ibuprofen is 2,400 mg /day**

### **Ibuprofen**

(max is 2,400 mg /day)

**EHR Rx:** 400 mg – max q 4 h (6 tabs a day)  
600 mg – max q 6 h (4 tabs a day)  
800 mg – max q 8 h (3 tabs per day)

Oral Suspension: 100 mg/5 mL - see section on pediatric patients for weight/age based Rx

Chewable tablet: 100 mg - see section on pediatric patients for weight/age based Rx

Avoid with pregnant patients

Ibuprofen may increase the effects of: oral anticoagulants, oral antidiabetics, lithium, methotrexate

Ibuprofen may decrease the effects of: diuretics, B blockers, ACE inhibitor

Drug interaction may occur with salicylates, methotrexate, cyclosporine, SSRI

### **Acetaminophen**

(max 4000 mg/day)

**EHR Rx:** 325 mg tab, 1 tab q 6 h (1300mg) or 1 tab q 4 h (1950 mg) or 2 tab q 6 h (2600)  
500 mg tab, 1 tab q 6 h (2000 mg) or 1 tab q 4 h (3000mg)

## **Notes:**

- Can be given if patient has allergy, bleeding problems or stomach upset secondary to aspirin or NSAID or is pregnant
- Do not combine with other drug combinations containing acetaminophen
- Max adult single dose: 650 mg, max daily dose: 4 grams

- **A lower dose of acetaminophen may be toxic for patients having depleted glycogen stores, such as are associated with dieting and anorexia, and for patients suffering primary liver dysfunction or receiving hepatotoxic medications**
- **Patients suspected of chronic alcoholism should limit their daily acetaminophen intake to 2 g, rather than the normal daily maximum of 4 g.**

### **Naproxen Sodium** **(OTC) as Aleve**

**EHR Rx:** 220 mg tablet    **Sig:** take 1 tablet every 12 hours, not to exceed 1375 mg in 24 hours

Avoid with pregnant/lactating patients

May increase the effects of: oral anticoagulants, oral antidiabetics, lithium, methotrexate

May decrease the effects of: diuretics, B blockers, ACE inhibitor

Interactions may occur with: cyclosporine, probenecid, SSRI

### **Acetaminophen-Codeine (Tylenol #3)**

**EHR Rx:** 300/30 mg tablet    **Sig:** Take 1 tablet every 6 hours as needed for pain

#### **Notes:**

- Can be given if patient has allergy, bleeding problems or stomach upset secondary to aspirin
- Do not combine with other drug combinations containing acetaminophen
- Consult with MD for patients having depleted glycogen stores, such as are associated with dieting and anorexia, and for patients suffering primary liver dysfunction or receiving hepatotoxic medications
- Patients suspected of chronic alcoholism should limit their daily acetaminophen intake to 2 g, rather than the normal daily maximum of 4 g.
- Can be filled generically
- Do not use with children or pregnant patients

### **Codeine Sulfate**

**EHR Rx:** 30 mg tab **Sig:** 1 tab q 4 h PO as needed for pain  
Max single dose: 60mg max daily dose: 360 mg in 24 hours

#### **Notes:**

##### **Usual Geriatric Dose for Pain**

Dose selection should be cautious, generally starting at the low end of the dosing range.

##### **Renal and Liver Impairment Dose Adjustments**

Use with caution; start with lower doses or with longer dosing intervals and titrate slowly while carefully monitoring for side effects.

**Drug Interactions:** increased sedation with other CNS depressants and alcohol  
Increased effects of anticholinergics

### Tramadol Hydrochloride

**EHR Rx:** Tramadol 50 mg tablets 1 tab q6h prn

**Notes:**

**Adults:** 50-100 mg q 4-6h PO Max: 400 mg/day for patients 75 years and younger, 300 mg/day for patients >75 years of age

**Renal Impairment:** creatine clearance of less than 30ml/min increase dosing interval to q 12h, Max: 200 mg/day

**Hepatic impairment:** decrease dosage to 50 mg q 12 h

**Drug interactions:** alcohol, carbamazepine, quinidine, MAOIs, tricyclic antidepressants, SSRIs, other CNS depressant drugs

### Tramadol/Acetaminophen

**EHR Rx:** 37.5/325 mg tab

Sig: 2 tab q6h prn

**Notes:**

- see Tramadol notes above
- Do not combine with other drug combinations containing acetaminophen
- Max adult single dose: 650 mg, max daily dose: 4 grams
- **A lower dose of acetaminophen may be toxic for patients having depleted glycogen stores, such as are associated with dieting and anorexia, and for patients suffering primary liver dysfunction or receiving hepatotoxic medications**
- **Patients suspected of chronic alcoholism should limit their daily acetaminophen intake to 2 g, rather than the normal daily maximum of 4 g.**

### Oxycodone

**EHR Rx:** 5 mg tablet

Sig: 1 tablet q6h prn pain

**Notes:**

- Use with caution in pregnant and lactating mothers, patients with liver impairment, severe heart disease
- Impaired renal function:  
GFR >50 ml/min, give 100% dose used in normal patients

GFR 10–50 ml/min, give 75% dose used in normal patients  
GFR <10 ml/min, give 50% dose used in normal patients

### **Oxycodone/Acetaminophen 5/325 (Percocet)**

**EHR Rx:** 5-325 mg tablet    **Sig:** 1 tablet q6h: fixed interval 24 – 48 hours (max 8 tab).

#### **Notes:**

- See oxycodone notes above
- Do not combine with other drug combinations containing acetaminophen
- Max adult single dose: 650 mg, max daily dose: 4 grams
- **A lower dose of acetaminophen may be toxic for patients having depleted glycogen stores, such as are associated with dieting and anorexia, and for patients suffering primary liver dysfunction or receiving hepatotoxic medications**
- **Patients suspected of chronic alcoholism should limit their daily acetaminophen intake to 2 g, rather than the normal daily maximum of 4 g.**

### **Hydrocodone/Acetaminophen 5/325 (Norco)**

**EHR Rx:** 5-325 mg tablet    **Sig:** 1 tablet q6h: fixed interval 24 – 48 hours (max 8 tab).

#### **Notes:**

Do not use Norco if you have used a MAO inhibitor in the past 14 days, such as isocarboxazid, linezolid, methylene blue injection, phenelzine, rasagiline, selegiline, or tranylcypromin. The use of MAOIs or tricyclic antidepressants is a contraindication to Norco

Drug Interactions with alcohol, other opioids, phenothiazines, sedative hypnotics, muscle relaxants, anticholinergics

Do not breast-feed while using Norco.

Medication List Reference: Mosby's Dental Drug Reference Eleventh Edition

## References:

1. Adapted from: Pennsylvania Guidelines on the Use of Opioids in Dental Practice American Society of Anesthesiologists Task Force on Acute Pain M. Practice guideline for acute pain management in the perioperative setting: an updated report by the American Society of Anesthesiologists TaskForce on Acute Pain Management. Anesthesiology 2012; 116:248-73.
- 2 . Medicaid Program Integrity What Is The Prescriber's Role in Preventing The Diversion Of Prescription Drugs? Department of Health and Human Services Centers for Medicare and Medicaid Services <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network MLN/MLNProducts /Downloads/Drug-Diversion-ICN901010.pdf>
3. Substance Abuse and Mental Health Services Administration. Results from the 2013 National Survey on Drug Use and Health: Summary of National Findings. Rockille, MD: Substance Abuse and Mental Health Services Administration; 2014. National Survey on Drug Use and Health Series H-48, Health and Human Services Publicaiton 14-4863.
4. Pain management for dentists: the role of ibuprofen [Alessandro Pozzi](#), DDS, PhD and [Luca Gallelli](#), MD, PhD Ann Stomatol. 2011 Jul-Dec; 2(3-4 Suppl): 3–24. Online 2012 Apr 15. PMCID: PMC3414241
5. "Medical Considerations for Dental Care of Patients with Alcohol Related Liver Disease", Glick, M JADA, Vol 128, Jan 1997 61-70.
6. Safe Usage of Analgesics in Patients with Chronic Liver Disease: A Review of the Literature By [Sina Menashehoff, DO](#), [Leonard B. Goldstein, DDS, PhD](#), [Samuel Brown, DO](#) and [Susan Stickevers, MD](#) Practical Pain Management
7. General Medicine and Surgery for Dental Practitioners Part 5 Liver Disease M. Greenwood, JG Meechan, British Dental Journal 195, 71-73 (2003)
8. [Drugs](#). 2012 Aug 20; 72(12):1645-69. Analgesics in patients with hepatic impairment: pharmacology and clinical implications. Bosilkovska M, Walder B, Besson M, Daali Y, Desmeules J.