

# MEDICAL AND DENTAL IMPLICATIONS OF THE MOST COMMON PHYSICIAN- PRESCRIBED MEDICATIONS!

Hosted by the  
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***Dental Meeting***

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***No. 1***      ***LEVOTHYROXINE*** (generic)

- Synthroid®
- replacement therapy (hypothyroidism)
- local anesthetic with vasoconstrictor is **NOT** contraindicated

***No. 2***      ***HYDROCODONE WITH ACETAMINOPHEN*** (generic)

- opiate & non-opiate analgesic
- addictive, second most abused drug by general dentists
- Schedule II (as of-**October 6, 2014**)
- opiate metabolism-CYP2D6
- **USE CAUTION WITH CHILDREN**
- Most common side effect: Nausea and vomiting
- Hydrocodone is more efficacious than codeine as an analgesic  
but causes less nausea & vomiting
- APAP and paracetamol-alternate names for acetaminophen
- **Maximum daily dose of acetaminophen is 3000 mg**
- **Maximum effective dose of acetaminophen is 1000 (650) mg**

***No. 3***      ***LISINOPRIL*** (generic)

- ACE (Angiotensin Converting Enzyme) inhibitor
- Zestril®, Prinivil®
- Dental Implications
  - Scalded mouth syndrome
  - Non-productive cough
  - NSAID interaction with long-term use

- **Other ACE inhibitors**
  - benazepril (Lotensin®)
  - captopril (Capoten®)
  - enalapril (Vasotec®, Epaned®)
  - fosinopril (Monopril®)
  - moexipril (Univasc®)
  - pirindopril (Aceon®, Coversyl®)
  - quinapril (Accupril®)
  - trandolapril (Mavik®)
- Tekturna ® (aliskiren)-direct renin inhibitor

**No. 4      *METOPROLOL TARTRATE/SUCCINATE* (generic)**

- Selective Beta Blocking Agent (Beta<sub>1</sub> blocking agent)
- Indications
  - antihypertensive
  - paroxysmal atrial/ventricular tachycardia
  - other abnormal cardiac rhythms
- Lopressor®, Toprol®/Toprol XL®
- DO NOT DISCONTINUE ABRUPTLY
- Long-term use of NSAIDs (~ 3 weeks) may diminish hypotensive effectiveness of beta blockers
- Other selective Beta<sub>1</sub> blocking agents
  - nebivolol (Bystolic®)
  - atenolol (Tenormin®)
  - bisoprolol (Zebeta®)
  - acebutolol (Sectral®)
  - esmolol (Brevibloc®)
  - betaxolol (Kerlone®)

**No. 5      *ATORVASTATIN* (generic)**

- HMG-CoA reductase Inhibitor
- Decrease serum total and LDL cholesterol
- grapefruit juice interactions
- Lipitor®
- Similar medications:
  - rosuvastatin (Crestor®)
  - lovastatin (Mevacor®, Altoprev®)
  - simvastatin (Zocor®)
  - pravastatin (Pravachol®)\*
  - pitavastatin (Livalo®)
  - fluvastatin (Lescol®)

- possible side effects of statins
  - muscle weakness
  - increased blood glucose or HbA1c
  - decreased cognitive ability?
- **CONTRAINDICATED IN PREGNANCY**
- New cholesterol lowering medications
  - PCSK9 inhibitors-mechanism
    - alirocumab (Praluent®) –Sanofi/Regneron
    - evolocumab (Repatha®)-Amgen

**No. 6**      **VENTOLIN HFA®** (albuterol)

- Beta 2 receptor agonist
- bronchodilator
- asthma, COPD
- prevention of exercise-induced bronchospasm
- **use caution** with aspirin/NSAIDs
- Proair HFA® (albuterol)

**No. 7**      **NEXIUM®** (esomeprazole)

- hydrogen ion pump inhibitor (PPI)
- **GastroEsophageal Reflux Disease (GERD)**
- possible side effects related to altered stomach Ph
  - increased risk for hip, wrist, and spine fracture
  - increased risk for Clostridium difficile
  - decreased serum magnesium
- similar medications
  - omeprazole (Prilosec®)
  - lansoprazole (Prevacid®)
  - dexlansoprazole (Dexilent®, Kapidex®)
  - rabeprazole (Aciphex®)
  - pantoprazole (Protonix®)
  - Zegarid®-a rapid release form of omeprazole

**No. 8**      **IBUPROFEN** (generic)

- **NonSteroidal Anti-Inflammatory Drug (NSAID)**
- COX<sub>1</sub> & COX<sub>2</sub> inhibitor
- Maximum daily dose is 3200 mg for acute pain
- Motrin®, Motrin-IB®, Advil® (OTC)

- Other useful NSAIDs (Cox1 and Cox 2 inhibitors)
  - 200-400 mg every 6 to 8 hours
- ketoprofen (generic)-Orudis is discontinued
  - 50-75 mg every 6 to 8 hours-immediate release
  - 200 mg per day for extended release
- meloxicam (Mobic®)-Long acting
  - 7.5mg - 15 mg per day
  - do not exceed 15 mg perday

**Rx Ibuprofen Tablets 400 mg**

**Disp. 16 tablets**

**Sig: Take 1-2 tablets 3-4 times per day**

**as needed for the relief of pain**

**Do not exceed eight tablets within 24 hours**

**No. 9** **TRAZADONE** (generic)

- Desyrel®
- Antidepressant
- Serotonin/Norepinephrine Reuptake Inhibitor (SNRI)
- **Use caution with vasoconstrictors**
- vilazodone (Viibryd®)
- lurasidone (Latuda®)

**No. 10** **WARFARIN** (generic)

- Coumadin®
- Anticoagulant
- produces hypoprothrombinemia (Vitamin K antagonist)
- INR is used to measure effectiveness
- dabigatrin (Pradaxa®)-Direct thrombin inhibitor
  - Praxbind (idarucizumab)- reversal agent
- rivaroxaban (Xarelto®)-Factor Xa inhibitor
- apixaban (Eliquis®)-Factor Xa inhibitor

- No. 11**      **PLAVIX** ®(clopidogrel)
- platelet aggregation inhibitor
  - blocks ADP receptor on blood platelet
  - clopidogrel is a **prodrug**
  - drug interactions are due to CYP enzymes
    - increased effect with tobacco users
    - decreased effect with PPIs
    - decreased effect with fluconazole (Diflucan)
  - prasugrel (Effient®)
  - ticagrelor (Brilinta®)
- No. 12**      **CYMBALTA**® (duloxetine)
- Serotonin/Norepinephrine Reuptake Inhibitor (SNRI)
  - depressive episodes
  - chronic fatigue syndrome
  - chronic pain (neuropathic)
  - adjunctive therapy for attention deficit hyperactivity disorder (ADHD)
  - **Use caution with vasoconstrictors**
- No. 13**      **FLUTICASONE NASAL** (generic)
- corticosteroid
  - management of seasonal and perennial allergic rhinitis
  - Flonase®
- No. 14**      **SINGULAIR**® (montelukast)
- leukotriene receptor antagonist
  - treatment of asthma
  - **use caution** with aspirin/NSAIDs
- No. 15**      **HYDROCHLORTHIAZIDE** (generic)
- HCTZ
  - diuretic/antihypertensive
  - depletes potassium
  - eat lots of bananas and drink lots of orange juice
- No. 16**      **ADVAIR DISCUS**®
- fluticasone and salmeterol
  - maintenance treatment of asthma
  - no problems with vasoconstrictor
  - oral candidiasis?

**No. 17**

**AMOXICILLIN (generic)**

- Broad spectrum antibiotic
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**Rx Penicillin V tablets 500 mg**

**Disp: 30 tablets**

**Sig: Take two tablets by mouth to start  
then one tablet every six hours  
for seven days**

- SBE prophylaxis

**Rx Amoxicillin tablets 500 mg**

**Disp: 4 tablets**

**Sig: Take four tablets by mouth 30-60 minutes  
before dental appointment**

**Cardiac Conditions Associated With the Highest Risk of  
Adverse Outcome from Endocarditis for Which Prophylaxis  
With Dental Procedures is Recommended**

1. Artificial heart valves
2. A history of infective endocarditis
3. Certain specific, serious congenital (present from birth) heart conditions, including
  - a. Unrepaired or incompletely repaired cyanotic congenital heart disease , including palliative shunts and conduits
  - b. A completely repaired congenital heart defect with prosthetic material or device, whether placed by surgery or by catheter intervention during the first six months after the procedure
  - c. Any repaired congenital heart defect with residual defects at the site or adjacent to the site of a prosthetic patch or prosthetic device
4. A cardiac transplant that develops a problem in a heart valve

## ***ANTIBIOTIC PROPHYLAXIS FOR PATIENTS WITH ORTHOPEDIC PROSTHESIS***

***Prophylaxis for Patients with Orthopedic Prostheses  
December 18, 2012***

**“The ADA and the American Academy of Orthopaedic Surgeons have found that the evidence does not support routine prescription of antibiotic prophylaxis for joint replacement patients undergoing dental procedures. This finding is based on a collaborative systematic review of the scientific literature.”-[www.ada.org/news](http://www.ada.org/news)**

**“In 2014, the ADA Council on Scientific Affairs assembled an expert panel to update and clarify the clinical recommendations found in the 2012 evidence-based guideline, *Prevention of Orthopaedic Implant Infection in Patients Undergoing Dental Procedures*. As was found in 2012, the 2014 updated systematic review found no association between dental procedures and prosthetic joint infections. Based on this review, the 2014 Panel concluded that prophylactic antibiotics given prior to dental procedures are *not recommended* for patients with prosthetic joint implants.” [www.ada.org](http://www.ada.org)**

***No. 18      AMLODIPINE BESYLATE (generic)***

- calcium channel blocker
- antihypertensive
- gingival hyperplasia
- Norvasc®
- Other calcium channel blockers
  - diltiazem(Cardizem®, Tiazac®)
  - felodipine (Plendil®)
  - nifedipine (Adalat®, Procardia®)
  - verapamil (Covera-HS®, VerelanPM®, Calan
  - nicardipine (Cardene®)

- No. 19**      **DIOVAN**® (valsarten)
- Angiotensin **R**eceptor **B**locker (**ARB**)
  - antihypertensive
  - Dental Implications
    - Scalded mouth syndrome
    - Non-productive cough (less than ACE Inhibitors)
    - NSAID interaction with long-term use
    - Other popular ARBs
      - candesarten (Atacand®)
      - irbesarten (Avapro®)
      - losarten (Cozaar®)
      - olmesarten (Benicar®)
- No. 20**      **ALPRAZOLAM** (generic)
- antianxiety agent
  - Xanax®
  - Xerostomia
  - most common drug found in “dirty” urine of methadone patients
  - combination of Xanax and Ecstasy is called “Parachuting”
  - other popular benzodiazepines
    - lorazepam (Ativan)
    - clonazepam (Klonopin)
- No. 21**      **METFORMIN** (generic)
- type II diabetes mellitus
  - appoint in the morning
  - Glucophage®
  - other uses
- No. 22**      **GABAPENTIN** (generic)
- antiepileptic
  - chronic pain
  - mood stabilizer
  - Neurontin®
- No. 23**      **OXYCODONE WITH ACETAMINOPHEN** (generic)
- More efficacious than codeine, but less nausea and vomiting
  - Schedule II
  - Percocet®, Tylox®
  - Oxecta®-Pfizer/Acura Pharmaceuticals



- No. 24      *SERTRALINE* (generic)**
- **Selective Serotonin Reuptake Inhibitor (SSRI)**
  - depressive episodes
  - chronic fatigue syndrome
  - chronic pain
  - adjunctive therapy for attention deficit hyperactivity disorder (ADHD)
  - Zoloft®
  - possible side effects
    - bruxism
    - bleeding
- No. 25      *FLUCONAZOLE* (generic)**
- oral antifungal
  - 100 mg BID first day and 100 mg/day for 13 days
  - Diflucan®
- No. 26      *TRIMETHOPRIM/SULFA* (generic)**
- trimethoprim and sulfamethoxazole (SMX/TMP)
  - antibacterial combination
  - urinary tract infections, middle ear infections, bronchitis
  - stomatitis
  - Bactrim®, Septra DS®, Sulfatrim®
- No. 27      *TRAMADOL* (generic)-Schedule IV Controlled Substance**
- Ultram®-50/100 mg every 4 to 6 hours
  - tramadol with acetaminophen (Ultracet®)
  - Contraindications
    - seizure disorders
    - allergy to codeine
    - medications that lower seizure threshold
  - Black Box Warnings

- No. 28**      **LYRICA®** (pregabalin)
- **Schedule V Controlled Substance**
  - antiepileptic
  - xerostomia
  - indicated for neuropathic pain
    - fibromyalgia
    - post herpetic neuralgia
    - diabetes associated neuralgia
- No. 29**      **FUROSEMIDE ORAL** (generic)
- loop diuretic
  - antihypertensive
  - Lasix®
- No. 30**      **SPIRIVA HANDIHALER®** (tiotropium)
- indicated for **Chronic Obstructive Pulmonary Disease (COPD)**
  - blocks acetylcholine at muscarinic receptor in bronchiolar smooth muscle
  - xerostomia, dentin hypersensitivity?

**\*\*\*DRUGS IN THE NEWS\*\*\***

- 1. HUMIRA** (adalimumab)
- indicated for various types of autoimmune diseases
    - Rheumatoid arthritis
    - Crohn's disease
    - Psoriatic arthritis
    - Juvenile idiopathic arthritis
  - these patients are more prone to infections
  - \$8.2 Billion in sales last year
- 2. ENBREL** (etanercept)
- indicated for various types of autoimmune diseases
    - Rheumatoid arthritis
    - Crohn's disease
    - Psoriatic arthritis
    - Juvenile idiopathic arthritis
  - these patients are more prone to infections
  - \$5.9 Billion in sales last year

3. **HARVONI** (ledipasvir and sofosbuvir)
  - used for treatment of chronic Hepatitis C
  - \$5.3 Billion in sales last year
  
4. **REMICADE** (infliximab)
  - indicated for various types of autoimmune diseases
    - Rheumatoid arthritis
    - Crohn's disease
    - Psoriatic arthritis
    - Juvenile idiopathic arthritis
  - these patients are more prone to infections
  - \$4.6 Billion in sales last year

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