

adha **CELL 2015**
92ND ANNUAL SESSION **JUNE 17-23*2015**
SESSION **NASHVILLE, TN**

CE Course Handout

“Top of the Heap”

**The Most Frequently Prescribed Brand-Name
Medications and Their Clinical Dental
Implications**

**Thursday, June 18, 2015
2:30pm-5:30pm**



**American
Dental
Hygienists'
Association**

PHARMACOLOGY
DECLASSIFIED

“Top of the Heap”


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**ADHA Annual Session
CLL 2015
June 18, 2015**

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Program Learning Objectives

Upon successful completion of this program, participants will be able to:

- Identify the 25 most frequently prescribed FDA approved brand name medications.
- Review the basic mechanism of action, therapeutic indications, and potential adverse reactions and drug interactions of these medications.
- Discuss the clinical dental considerations of these medications and potential impact on dentistry.

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The Top 25 Most Frequently Prescribed Brand Name Medications

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The Top 25

1. Lipitor	10. Cymbalta	18. Nasonex
2. Nexium	11. Diovan	19. Viagra
3. Plavix	12. Ventolin HFA	20. Lyrica
4. Singulair	13. Diovan HCT	21. Celebrex
5. Lexapro	14. Actos	22. Concerta
6. Crestor	15. Seroquel	23. Spiriva
7. Synthroid	16. Levaquin	24. Effexor XR
8. ProAir HFA	17. Lantus	25. Tricor
9. Advair Diskus		

Source: SDF's Vector One: Nationstl (as published in Drug Topics)

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Lipitor (atorvastatin)
Crestor (rosuvastatin)

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Antihyperlipidemic Agents

- Hyperlipidemia
 - Elevation of lipids (fats) in the bloodstream
- Lipoproteins
 - Cholesterol, phospholipids and triglycerides are insoluble in our water-based blood
 - Must be bound to lipid-containing proteins (lipoprotein) for transport

Antihyperlipidemic Agents

- Low-density lipoproteins (LDL's)
 - Transport cholesterol to peripheral cells
 - Excess cholesterol is discarded into the blood
 - Leads to high cholesterol
 - Leads to atherosclerotic plaque formation
- High-density lipoproteins (HDL's)
 - Transfer cholesterol from peripheral cells to liver
 - Cholesterol is metabolized in liver and excreted

Lipitor (atorvastatin)

- Pharmacologic Classification
 - Antihyperlipidemic
- Mechanism of Action
 - Inhibits HMG-CoA reductase, reduces cholesterol synthesis, decreases LDL's and increases HDL's
- Therapeutic Indication
 - Treatment of high cholesterol
 - Reduction of risk of MI, angina

Lipitor (atorvastatin)

- Adverse Effects
 - Headache
 - Myalgia, allergy
 - GI upset
 - Anterograde amnesia
 - Flatulence
- Dental Considerations
 - Drug interactions with erythromycin, fluconazole, grapefruit juice, pomegranate juice
 - Possible severe myopathy or rhabdomyolysis
- Precautions
 - Active liver disease
 - Pregnancy

Nexium (esomeprazole)

Nexium (esomeprazole)

- Pharmacologic Classification
 - Proton-pump inhibitor
- Mechanism of Action
 - Inhibits enzyme on the surface of parietal cells, reduces gastric acid synthesis
- Therapeutic Indication
 - Treatment of gastroesophageal reflux disease

Nexium (esomeprazole)

- Adverse Effects
 - Headache
 - GI upset
 - Dizziness
 - Xerostomia
 - Halitosis
- Precautions
 - Active liver disease
 - Allergy
- Dental Considerations
 - Reduced absorption of drugs requiring low pH
 - Use NSAIA's with caution
 - Possible blood dyscrasias
 - Consider semi-supine chair position

Plavix (clopidogrel)

Thromboembolic Disease

- Coagulation
 - A normal clotting mechanism which prevents blood loss when the integrity of a blood vessel is disrupted
- Hypercoagulation
 - An abnormally overactive clotting mechanism which produces clots (thrombi) within undamaged vessels
 - Arterial thrombi produce stroke, MI, death
 - Venous thrombi produce deep vein thrombosis and pulmonary embolism

Oral Antiplatelet Agents

- Types
 - aspirin
 - clopidogrel (Plavix)
 - dipyridamole (Persantine)
 - prasugrel (Effient)
 - ticagrelor (Brilinta)
- Uses
 - Prevention of cardiovascular events in adults with
 - Acute coronary syndrome
 - Recent MI, TIA, stroke
 - Post-stenting

Oral Antiplatelet Agents

- Dental considerations
 - Drug interactions with liver enzyme inducers and inhibitors (Plavix and Brilinta)
 - Increased risk of bleeding may be exacerbated by other drugs used in dentistry
 - NSAIA's
 - Antibiotics
 - No contraindication for dental treatment

Plavix (clopidogrel)

- Pharmacologic Classification
 - Platelet aggregation inhibitor
- Mechanism of Action
 - Inhibits binding of ADP to platelet receptors, inhibits formation of thrombi
- Therapeutic Indication
 - Treatment of MI, stroke, PVD
 - Treatment of acute coronary syndrome
 - Prevention of thrombosis post-stent placement

Plavix (clopidogrel)

- Adverse Effects
 - Skin rash
 - Epistaxis, bruising
 - GI upset
 - Stomatitis, dysgeusia
- Precautions
 - Active liver disease
 - Active bleeding
- Dental Considerations
 - Avoid discontinuation for dental procedures due to increased risk of thromboembolism
 - Use NSAIA's with caution
 - Consider local hemostasis measures

Oral Anticoagulant Agents

- Types
 - Coumadin (warfarin)
 - Inhibits the synthesis of Vitamin K-dependent clotting factors
- Uses
 - Prevention and treatment of venous thrombosis, pulmonary embolism, thromboembolism due to
 - Atrial fibrillation
 - Prosthesis
 - Recent MI

Oral Anticoagulant Agents

- Patient care considerations
 - Increased risk of bleeding
 - Assessed by INR
 - INR (international normalized ratio)
 - Value of 1 is “normal”
 - Value of <3.5 is needed for dental hygiene treatment
 - INR test should be done immediately before oral treatment

Oral Anticoagulant Agents

- Dental considerations
 - Anticoagulant effect may be reversed with administration of Vitamin K or whole blood
 - Increased risk of bleeding may be exacerbated by other drugs used in dentistry
 - NSAIA's
 - Antibiotics
 - No contraindication for dental treatment!

Oral Anticoagulant Agents

- Types
 - Pradaxa (dabigatran)
 - Inhibits thrombin (factor IIa)
- Uses
 - Prevention and treatment of venous thrombosis, pulmonary embolism, thromboembolism due to atrial fibrillation

Oral Anticoagulant Agents

- Patient care considerations
 - No antidote for reversal of anticoagulant effect
 - No INR testing for monitoring
 - High incidence of dyspepsia
 - Due to tartaric acid included in capsule to improve absorption
 - Missed doses increase risk of stroke
 - Must be taken twice daily

Oral Anticoagulant Agents

- Patient care considerations
 - Increased risk of bleeding may be exacerbated by other drugs used in dentistry
 - NSAIA's
 - Antibiotics
 - Co-administration with aspirin doubles bleeding risk
 - No contraindication for dental treatment!

Oral Anticoagulant Agents

- Types
 - Xarelto (rivaroxaban)
 - Eliquis (apixaban)
 - Inhibit factor Xa
- Uses
 - Prevention and treatment of venous thrombosis, post-hip or knee replacement
 - Prevention and treatment of venous thrombosis, pulmonary embolism, thromboembolism due to atrial fibrillation

Oral Anticoagulant Agents

- Patient care considerations
 - No antidote for reversal of anticoagulant effect
 - No INR testing for monitoring
 - Possible drug interactions
 - Impaired renal function may alter efficacy
 - Should be taken with food

Oral Anticoagulant Agents

- Patient care considerations
 - Increased risk of bleeding may be exacerbated by other drugs used in dentistry
 - NSAIA's
 - Antibiotics
 - No contraindication for dental treatment!

To Bleed or Not to Bleed...

There is a widespread belief that oral anti-thromboembolic therapy must be discontinued before dental treatment to prevent serious hemorrhagic complications.

- This is regardless of the fact that dental treatment rarely involves trauma to major blood vessels and that effective local hemostatic measures exist in dentistry (aminocaproic acid or tranexamic acid oral rinse)

To Bleed or Not to Bleed...

The potential for excessive bleeding with continuation of therapy must be weighed against the adverse effects of discontinuation of therapy.

- Patients receiving oral antithromboembolic therapy may bleed more than what is normally encountered.
- Patients who discontinue such therapy are at greater risk for resulting hypercoagulation.

To Bleed or Not to Bleed...

Clinical literature does not support routine discontinuation of oral antithromboembolic therapy for dental patients.

- Discontinuation of oral antithromboembolic therapy prior to dental treatment puts the patient at unnecessary risk for severe morbidity and mortality.
- Antithromboembolic therapy is not within the scope of practice of dentists or hygienists.

Singular (montelukast)

Singular (montelukast)

- Pharmacologic Classification
 - Leukotriene receptor antagonist
- Mechanism of Action
 - Inhibits binding of leukotrienes to receptors, decreases bronchoconstriction and edema
- Therapeutic Indication
 - Prophylaxis and treatment of chronic bronchial asthma

Singular (montelukast)

- Adverse Effects
 - Headache
 - Skin rash
 - GI upset
 - Viral infection
- Precautions
 - Not for use in acute asthma or exercise-induced asthma
- Dental Considerations
 - Keep short-acting bronchodilators readily available
 - Use NSAIA's with caution
 - Use vasoconstrictors (sulfites) with caution
 - Consider semi-supine chair position

Lexapro (escitalopram)

Antidepressant Agents

- Mechanism of action/Types
 - Inhibit reuptake of norepinephrine/serotonin
 - Tricyclic antidepressants (TCA's)
 - amitriptyline (Elavil)
 - trazodone (Desyrel)
 - venlafaxine (Effexor)
 - Inhibit reuptake of serotonin only (SSRI's)
 - fluoxetine (Prozac)
 - sertraline (Zoloft)

Antidepressant Agents

- Mechanism of action/Types
 - Inhibit reuptake of norepinephrine/dopamine
 - bupropion (Wellbutrin)
 - Inhibit breakdown of norepinephrine (MAOI's)
 - phenelzine (Nardil)
 - selegiline (Emsam transdermal patch)
 - Use epinephrine with caution

Lexapro (escitalopram)

- Pharmacologic Classification
 - Antidepressant
- Mechanism of Action
 - Selective serotonin reuptake inhibitor (SSRI), increases serotonin activity at receptors
- Therapeutic Indication
 - Treatment of major depressive disorder
 - Treatment of generalized anxiety disorder

Lexapro (escitalopram)

- Adverse Effects
 - Headache
 - Xerostomia
 - GI upset
 - Bruxism
- Precautions
 - Increased bleeding
 - Serotonin syndrome
 - Seizure disorder
 - Suicidal thoughts
- Dental Considerations
 - Increased risk of bleeding events, especially with concurrent use of NSAIA's, aspirin, warfarin
 - Use epinephrine with caution, monitor blood pressure and pulse

Synthroid (levothyroxine)

Synthroid (levothyroxine)

- Pharmacologic Classification
 - Thyroid hormone
- Mechanism of Action
 - Synthetic form of thyroxine, responsible for normal growth and development
- Therapeutic Indication
 - Treatment of hypothyroidism

Synthroid (levothyroxine)

- Adverse Effects
 - Alopecia
 - Dry skin
 - GI upset
 - Dysphagia
- Precautions
 - Allergy
 - Ischemic heart disease
- Dental Considerations
 - Overdose may lead to exaggerated response to epinephrine and cardiac arrhythmias
 - Refer uncontrolled patients for medical consult
 - Monitor blood pressure and pulse

ProAir HFA (albuterol)
Ventolin HFA (albuterol)

ProAir HFA (albuterol)

- Pharmacologic Classification
 - Short-acting Beta-2 adrenergic agonist

- Mechanism of Action
 - Stimulates Beta-2 receptors, relaxes bronchial smooth muscle, producing bronchodilation

- Therapeutic Indication
 - Prevention and relief of bronchospasm and exercise-induced bronchospasm

ProAir HFA (albuterol)

- Adverse Effects
 - Headache
 - Tachycardia
 - Pharyngitis
 - Xerostomia

- Dental Considerations
 - Keep short-acting bronchodilators readily available
 - Use NSAIA's with caution
 - Use vasoconstrictors (sulfites) with caution
 - Consider semi-supine chair position

- Precautions
 - Hyperthyroidism
 - Severe cardiac disease

Advair Diskus (fluticasone/salmeterol)

Advair Diskus (fluticasone/salmeterol)

- Pharmacologic Classification
 - A combination of a corticosteroid and long-acting Beta-2 adrenergic agonist

- Mechanism of Action
 - Corticosteroid reduces inflammation and Beta-2 agonist produces bronchodilation

- Therapeutic Indication
 - Prophylaxis and treatment of chronic bronchial asthma

Advair Diskus (fluticasone/salmeterol)

- Adverse Effects
 - Headache
 - Tachycardia
 - Oral candidiasis
 - Xerostomia

- Dental Considerations
 - Rinse after use to minimize risk of candidiasis and fungal pharyngitis
 - Use NSAIA's with caution
 - Use vasoconstrictors (sulfites) with caution

- Precautions
 - Not for use in acute asthma or exercise-induced asthma
 - Asthma-related death

Cymbalta (duloxetine)

Cymbalta (duloxetine)

- Pharmacologic Classification
 - Antidepressant
- Mechanism of Action
 - Inhibits serotonin and norepinephrine reuptake, increases their activity at their receptors
- Therapeutic Indication
 - Treatment of major depressive disorder
 - Treatment of diabetic neuropathy
 - Treatment of fibromyalgia and chronic muscle pain

Cymbalta (duloxetine)

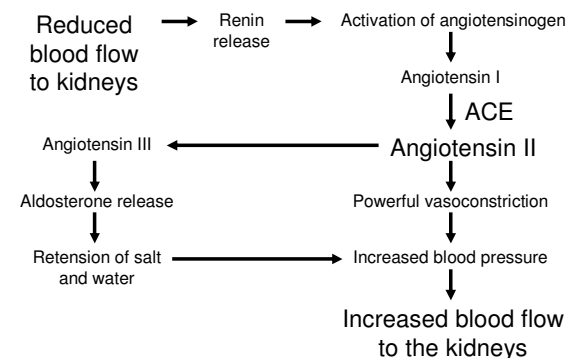
- Adverse Effects
 - Headache
 - Xerostomia
 - GI upset
 - Bruxism
- Precautions
 - Increased bleeding
 - Hepatotoxicity
 - Serotonin syndrome
 - Suicidal thoughts
- Dental Considerations
 - Increased risk of bleeding events, especially with concurrent use of NSAIA's, aspirin, warfarin
 - Use epinephrine with caution, monitor blood pressure and pulse

Diovan (valsartan) Diovan HCT (valsartan/HCTZ)

Hypertension

- Hypertension
 - A failure in fluid volume homeostasis in the renin-angiotensin-aldosterone system in the kidneys
 - Causes the volume of blood being pumped to exceed the capacity of the cardiovascular system.
 - Results in high blood pressure (augmented by SANS stimulation)

Renin-Angiotensin-Aldosterone System



Sympathetic Autonomic Nervous System

Receptor	Stimulation by (nor)epinephrine produces:
α_1	Vasoconstriction (skin and mucosa)
β_1	Increased cardiac activity
β_2	Vasodilation (skeletal muscle) Bronchodilation

Treatment of Hypertension

- Non-pharmacologic treatment of hypertension
 - Reduce weight
 - Limit alcohol consumption
 - Increase aerobic physical activity
 - Restrict sodium intake
 - Stop smoking

Treatment of Hypertension

- Pharmacologic treatment of hypertension

<u>Goal of Treatment</u>	<u>Drugs Employed</u>
Reduce plasma volume	Diuretics
Dilate blood vessels	ACEI's, ARB's, CCB's, hydralazine
Reduce cardiac output (via SANS)	Beta-1 Blockers, Alpha-1 Blockers, clonidine

Diovan (valsartan)

- Pharmacologic Classification
 - Angiotensin II receptor (AT1) antagonist
- Mechanism of Action
 - Inhibits binding of angiotensin II to receptors, produces vasodilation and reduces blood pressure
- Therapeutic Indication
 - Treatment of hypertension
 - Treatment of heart failure

Diovan (valsartan)

- | | |
|---|--|
| <ul style="list-style-type: none"> ▪ Adverse Effects <ul style="list-style-type: none"> – Dizziness – Orthostasis – GI upset – Joint pain ▪ Dental Considerations <ul style="list-style-type: none"> – Use sedatives and general anesthesia with caution (possible hypotensive episode) – Consider short appointments and stress-reduction techniques | <ul style="list-style-type: none"> ▪ Precautions <ul style="list-style-type: none"> – Hepatic impairment – Renal artery stenosis |
|---|--|

Actos (pioglitazone)

Antidiabetic Agents

- Treatment of Diabetes Type II (NIDDM)
 - Stimulate insulin production
 - glipizide (Glucotrol, XL)
 - repaglinide (Prandin)
 - nateglinide (Starlix)
 - Reduce cellular insulin resistance
 - rosiglitazone (Avandia)
 - pioglitazone (Actos)
 - Decrease hepatic glucose production and increase cellular sensitivity to insulin
 - metformin (Glucophage)

Antidiabetic Agents

- Treatment of Diabetes Type II (NIDDM) (continued)
 - Inhibit breakdown of ingested carbohydrates
 - acarbose (Precose)
 - Mimic the action of incretin hormones
 - Prolongs the stimulation of insulin production
 - exenatide (Byetta)
 - Inhibit the breakdown of incretin hormones
 - sitagliptin (Januvia)
 - saxagliptin (Onglyza)
 - linagliptin (Tradjenta)
 - alogliptin (Nesina)

Actos (pioglitazone)

- Pharmacologic Classification
 - Antidiabetic
- Mechanism of Action
 - Reduces skeletal muscle insulin resistance and decrease hepatic glucose output
- Therapeutic Indication
 - Treatment of Type II diabetes

Actos (pioglitazone)

- Adverse Effects
 - Headache
 - Myopathy
 - Sinusitis
 - Pharyngitis
- Precautions
 - Hepatic impairment
 - Renal impairment
 - Increased risk of MI
- Dental Considerations
 - No drug-specific
 - Consider susceptibility to infection
 - Consider decreased wound healing
 - Consider AM appointments/stress reduction

Seroquel (quetiapine)

Seroquel (quetiapine)

- Pharmacologic Classification
 - Psychotherapeutic agent
- Mechanism of Action
 - Antagonizes dopamine, serotonin, histamine, and alpha-1 adrenergic receptors, reduces psychoses
- Therapeutic Indication
 - Treatment of schizophrenia

Seroquel (quetiapine)

- Adverse Effects
 - Hypertension
 - Orthostasis
 - Somnolence
 - Xerostomia
 - Weight gain
- Precautions
 - Hepatic impairment
 - Renal impairment
 - Tardive dyskinesia
 - Suicidal thoughts
- Dental Considerations
 - Prolongs QT interval (caution with vasoconstrictor)
 - Additive sedation with CNS depressants
 - Possible extrapyramidal adverse effects
 - Drug is also used illicitly (“cheeked”)

Levaquin (levofloxacin)

Antibacterial Agents

- General patient care considerations
 - Drug interactions
 - Warfarin
 - Antibiotics reduce flora that make vitamin K (increase effect of warfarin)
 - Other antiinfectives (antagonism)
 - Bacteriostatic and bactericidal antibiotics should not be used together
 - Oral contraceptives
 - Reduced effectiveness

Antibacterial Agents

- General patient care considerations (continued)
 - Allergic reactions
 - Possible anaphylaxis
 - Gastrointestinal side effects
 - Pain
 - Increased GI motility and diarrhea
 - Pseudomembranous colitis
 - Pregnancy/teratogenicity
 - Risk of suprainfection

Levaquin (levofloxacin)

- Pharmacologic Classification
 - Fluoroquinolone antiinfective
- Mechanism of Action
 - Interferes with bacterial DNA synthesis and cell replication, bactericidal
- Therapeutic Indication
 - Treatment of upper/lower respiratory infections
 - Treatment of urinary tract infections

Levaquin (levofloxacin)

- Adverse Effects
 - Headache
 - GI upset
 - Pharyngitis
 - Tendonitis
- Precautions
 - Hypersensitivity
 - Renal impairment
- Dental Considerations
 - Prolongs QT interval (caution with vasoconstrictor)
 - May increase NSAIA-induced seizure risk
 - May increase warfarin anticoagulant effect

Lantus (insulin glargine)

Insulins

Short Acting	Intermediate Acting	Long Acting
<ul style="list-style-type: none">▪ Humulin R▪ Insulin aspart (Novolog)▪ Insulin lispro (Humalog)▪ Insulin glulisine (Apidra)	<ul style="list-style-type: none">▪ Humulin N▪ Humulin L▪ Humulin 70/30▪ Humalog Mix 75/25	<ul style="list-style-type: none">▪ Humulin U▪ Insulin detemir (Levemir)▪ Insulin glargine (Lantus)** <p>**discard 28 days after 1st use</p>

Lantus (insulin glargine)

- Pharmacologic Classification
 - Long-acting insulin
- Mechanism of Action
 - Facilitates passage of glucose into skeletal and adipose tissue, regulates serum glucose levels
- Therapeutic Indication
 - Treatment of Type I diabetes
 - Treatment of Type II diabetes

Lantus (insulin glargine)

- Adverse Effects
 - Fatigue
 - Muscle weakness
 - Skin rash
 - Mouth numbness
- Precautions
 - Hypoglycemia
 - Hypokalemia
- Dental Considerations
 - Additive hypoglycemia with NSAIA's, salicylates
 - Corticosteroids and epinephrine may increase serum glucose levels
 - Monitor for hypoglycemia, ketoacidosis

Nasonex (mometasone furoate)

Nasonex (mometasone furoate)

- Pharmacologic Classification
 - Nasal corticosteroid
- Mechanism of Action
 - Inhibits release of inflammatory mediators, prevents onset of allergic reaction
- Therapeutic Indication
 - Treatment and prophylaxis of seasonal and perennial allergic rhinitis

Nasonex (mometasone furoate)

- Adverse Effects
 - Headache
 - Epistaxis
 - Viral infection
 - Pharyngitis
- Precautions
 - Immunosuppression
 - Impaired wound healing
- Dental Considerations
 - Rinse after use to minimize risk of candidiasis and fungal pharyngitis

Viagra (sildenafil)

Autonomic Signaling Modifiers

- PDE-5 Inhibitors
 - Promote vasodilation in corpus cavernosum
- Therapeutic uses
 - Treatment of erectile dysfunction (ED)
- Examples
 - Sildenafil (Viagra)
 - Vardenafil (Levitra, Staxyn)
 - Tadalafil (Cialis)
 - Avanafil (Stendra)

Viagra (sildenafil)

- Pharmacologic Classification
 - PDE Type 5 Inhibitor
- Mechanism of Action
 - Inhibits PDE Type 5, results in smooth muscle relaxation and increased blood flow in cavernosum
- Therapeutic Indication
 - Treatment of male erectile dysfunction

Viagra (sildenafil)

- Adverse Effects
 - Headache
 - Nasal congestion
 - GI upset
 - Possible loss of hearing/vision
- Precautions
 - Concurrent use of nitrates
 - Possible interaction with nitrous oxide?
- Dental Considerations
 - Drug interactions with erythromycin, fluconazole
 - Possible priapism

Lyrica (pregabalin)

Lyrica (pregabalin)

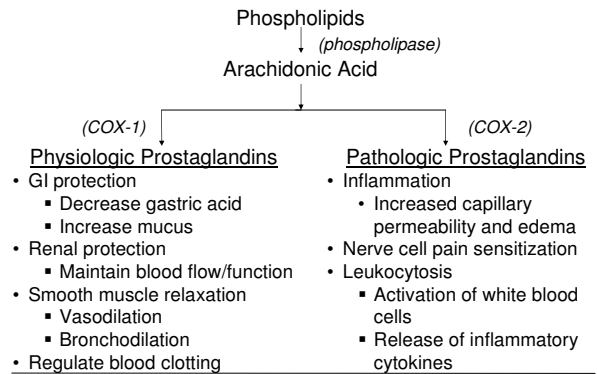
- Pharmacologic Classification
 - Antineuralgic, anticonvulsant
- Mechanism of Action
 - Binds to calcium channels in CNS, inhibits excitatory neurotransmitter release
- Therapeutic Indication
 - Treatment of diabetic peripheral neuropathy, postherpetic neuralgia, fibromyalgia
 - Treatment of partial-onset seizure disorder

Lyrica (pregabalin)

- Adverse Effects
 - Peripheral edema
 - Dizziness
 - Weight gain
 - Xerostomia
- Precautions
 - Abnormal thoughts
 - Mood changes
 - Amnesia and mental impairment
- Dental Considerations
 - Additive sedation with CNS depressants
 - Medical consult for determine seizure control
 - Consider stress-reduction techniques

Celebrex (celecoxib)

COX Inhibition



Celebrex (celecoxib)

- Pharmacologic Classification
 - NSAIA, analgesic
- Mechanism of Action
 - Selective COX-2 inhibitor, reduces prostaglandin synthesis
- Therapeutic Indication
 - Treatment of osteoarthritis/rheumatoid arthritis
 - Treatment of acute musculoskeletal pain and primary dysmenorrhea

Celebrex (celecoxib)

- Adverse Effects
 - Peripheral edema
 - Dizziness
 - Stomatitis
 - Xerostomia
- Precautions
 - Increased risk of serious cardiovascular thrombotic events, including death
- Dental Considerations
 - Contraindicated in patients with hypersensitivity to aspirin, NSAIA's or sulfonamides
 - Drug interactions with erythromycin, fluconazole
 - May increase lithium plasma levels and toxicity

Concerta (methylphenidate)

Concerta (methylphenidate)

- Pharmacologic Classification
 - CNS stimulant

- Mechanism of Action
 - Blocks reuptake of norepinephrine and dopamine, increases attention span and mental alertness

- Therapeutic Indication
 - Treatment of ADHD
 - Treatment of narcolepsy

Concerta (methylphenidate)

- Adverse Effects
 - Headache
 - Hypertension
 - GI upset
 - Xerostomia

- Dental Considerations
 - Additive CNS stimulation with TCA's, SSRI's
 - Monitor blood pressure and pulse
 - Use vasoconstrictors with caution

- Precautions
 - Psychiatric disorders
 - Seizure disorders
 - Abuse potential

Spiriva (tiotropium)

Spiriva (tiotropium)

- Pharmacologic Classification
 - Anticholinergic bronchodilator

- Mechanism of Action
 - Blocks respiratory muscarinic receptors, produces smooth muscle relaxation, bronchodilation

- Therapeutic Indication
 - Treatment of bronchospasm associated with COPD

Spiriva (tiotropium)

- Adverse Effects
 - Sinusitis
 - Pharyngitis
 - Stomatitis
 - Xerostomia

- Precautions
 - Not for use in acute asthma or exercise-induced asthma
 - Paradoxical bronchospasm

- Dental Considerations
 - Keep short-acting bronchodilator readily available
 - Monitor vital signs, especially respiration
 - Rinse after use to minimize xerostomia
 - Consider semi-supine chair position

Effexor XR (venlafaxine)

Effexor XR (venlafaxine)

- Pharmacologic Classification
 - Antidepressant

- Mechanism of Action
 - Inhibits serotonin and norepinephrine reuptake, increases their activity at their receptors

- Therapeutic Indication
 - Treatment of major depressive disorder
 - Treatment of generalized anxiety disorder

Effexor XR (venlafaxine)

- Adverse Effects
 - Headache
 - Xerostomia
 - GI upset
 - Bruxism

- Precautions
 - Increased bleeding
 - Serotonin syndrome
 - Seizure disorder
 - Suicidal thoughts

- Dental Considerations
 - Increased risk of bleeding events, especially with concurrent use of NSAIA's, aspirin, warfarin
 - Use epinephrine with caution, monitor blood pressure and pulse

Tricor (fenofibrate)

Tricor (fenofibrate)

- Pharmacologic Classification
 - Antihyperlipidemic

- Mechanism of Action
 - Enhances synthesis of lipoprotein lipase, reduces VLDL's and increases HDL's

- Therapeutic Indication
 - Treatment of high cholesterol

Tricor (fenofibrate)

- Adverse Effects
 - Headache
 - Myalgia
 - GI upset
 - Xerostomia

- Precautions
 - Active liver disease
 - Increased risk of rhabdomyolysis with statins

- Dental Considerations
 - Increased risk of bleeding due to blood dyscrasias, enhanced anticoagulant effect of warfarin
 - Use NSAIA's and aspirin with caution