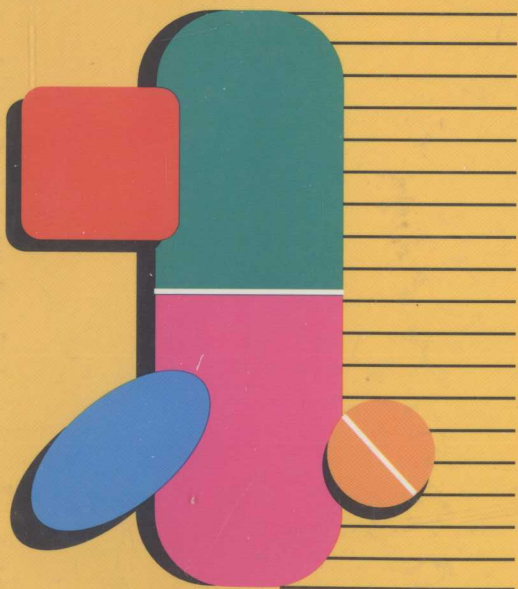


1997
Mosby's
**Dental
Drug
Reference**



Gage • Pickett

1997

Mosby's

Dental Drug Reference

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A NOTE TO THE READER

The authors and publisher have made every attempt to check dosages and dental content for accuracy. Because the science of pharmacology is continually advancing, our knowledge base continues to expand.

Therefore we recommend that the reader always check product information for changes in dosage or administration before administering any medication. This is particularly important with new or rarely used drugs.

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Authors' Comments

The idea that spawned this reference was the perceived need for an inexpensive, convenient, and concise resource that focused on basic drug information relevant to dental patient evaluation and treatment planning. Your acceptance of this drug reference resource has sustained this concept. In this time of an expanding and aging population in which patients often come to the dental office with one or more chronic diseases, multiple drug therapy has become a significant challenge to patient evaluation and management strategies. Our purpose in designing this volume was an attempt to fill a perceived void for essential drug information specifically for dentistry. The response from the users of this volume has been extremely gratifying.

Mosby's Dental Drug Reference is small enough to be conveniently located in a dental operator cabinet and yet includes essential drug facts necessary for patient evaluation and management. The drugs that patients are taking can be quickly identified during the medical history review. This book is not intended to include every drug available but concentrates on the top 200 prescription drugs as identified from the *Pharmacy Times* annual survey of prescription drug use in the United States. New drug approvals are also included in each revision. We have expanded this edition to include other popular prescription and over-the-counter drug products. A number of drugs have been included in response to your requests. Practitioners, residents, students, and faculty have made excellent recommendations for the inclusion of specific drugs not previously considered. Our original intent was to provide information about drugs that patients would be taking as they presented for dental treatment; however, more dental drugs are included in this volume at your request.

The book is only as good as it serves the purpose of assisting the practitioner or student to quickly locate drug facts. To make it a more useful volume and as annual revisions are completed, we continue to request feedback from users. Feedback should include suggestions for monographs on drugs not included (because drug use may vary regionally), correction of errors, improved fact tables, new appendixes, or any other suggestions for improvements. Please keep in mind that the intent of this volume is to provide information about drugs that patients may be taking. It is not intended as a guide for prescribing drugs or to provide extensive FDA-approved drug information. We are gradually expanding the scope to include more dental drugs, but we still want to keep the volume small for ease in handling and convenience of location.

The authors wish to express their sincere gratitude for the contributions made by the Editorial Review Board, who were selected on the basis of their extensive experience and knowledge. A special word of appreciation goes to Ms. Brigitte Wallaert-Sims for her assistance in the laborious task of computer data entry, in printing the completed manuscript, and in putting up with our demands.

Preface

Mosby's Dental Drug Reference is designed to be used chairside in the dental office as a quick, concise drug reference resource. Its purpose is to assist the dentist and dental hygienist in the rapid identification of drugs that patients may be taking as they come to the dental office. However, we have expanded this edition to include a number of drugs indicated for dental therapeutics. The design has proven to provide easy access to essential drug information to facilitate completion of the medical history review. This book is not intended to be a comprehensive drug compendium nor to make specific recommendations about selecting and prescribing dental drugs, but the dental drugs will add a new dimension for the practitioner. This book contains concise and easy to read "micro" drug monographs with basic information about each drug. Drugs are presented alphabetically by generic name in a succinctly ordered and standardized format with pertinent drug information for the dentist, dental hygienist, or dental auxiliary. A user-friendly cross index is the key to using the book for both brand and generic name identification. Information is provided about more than 2000 drug products. A special feature of this book is an emphasis on drug interactions of dental interest and the highlighting of oral side effects. The Dental Considerations section includes information that is useful in patient management. Useful fact tables with information about dose calculations and the prophylactic antibiotic regimen for bacterial endocarditis are located on the front and back inside covers and can be easily accessed.

Each drug monograph is designed to include the following information:

GENERIC NAME of the drug

PRONUNCIATION of the generic name

COMMON BRAND NAMES for the generic drug as sold in the United States and Canada

DRUG CLASS to facilitate drug identification

CONTROLLED SUBSTANCES schedules as appropriate for the United States and Canada

ACTION provides a brief description of the mechanism of action of the drug. More detailed mechanisms are provided in standard textbooks.

USES or indications for the drug include those approved by the FDA.

Unlabeled or unapproved uses refer to indications not currently recognized by the FDA and are identified where appropriate for selected drugs.

DOSAGE AND ROUTES of administration are provided to assist the dental professional in assessing the dosage in relationship to the seri-

ousness of the patient's disease and predicting potential side effects and drug interactions. Complete prescribing information should be consulted before writing prescriptions for drugs listed in the book.

SIDE EFFECTS/ADVERSE REACTIONS are grouped according to body systems; common side effects are listed in italic type, and life-threatening reactions are written in boldface italic type. Information regarding the oral manifestations of side effects are listed first for easy identification. Specific system side effects are presented in the same sequence for each monograph.

CONTRAINDICATIONS are identified for instances in which the medication should absolutely not be given or in which risk vs benefit criteria must be established.

PRECAUTIONS to be considered when prescribing and using the drug, as well as pregnancy categories, are identified.

PHARMACOKINETICS are briefly described for each drug.

DRUG INTERACTIONS OF CONCERN TO DENTISTRY are presented. Drug interactions may be either beneficial or harmful, and clinical judgment must always be applied for each interaction listed. The duration of drug use, magnitude of the dose, patient status, and urgency of need for a drug must be considered for each drug interaction.

DENTAL CONSIDERATIONS include general information related to dental management and treatment of a patient taking a given drug, suggestions for medical consultations, and recommendations for the patient/family in assisting with patient care or preventing dental complications or disease.

The following appendixes can be found after the drug monograph section:

- Appendix A—Abbreviations
- Appendix B—Drugs causing dry mouth
- Appendix C—Controlled substances chart
- Appendix D—FDA pregnancy categories
- Appendix E—Combination products
- Appendix F—Selected references

Tommy W. Gage
Frieda Atherton Pickett

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absorbable gelatin sponge

Gelfoam

Drug class.: Hemostatic, purified gelatin

Action: Absorbs blood, provides area for clot formation

Uses: Hemostasis during surgery

Dosage and routes:

Dental use

• **Adult:** TOP can be applied dry or moistened with normal saline solution; blot on sterile gauze to remove excess solution, shape to fit with light finger compression; hold pressure on dry foam for 1-2 min

Available forms include: Dental packs, size 2 (10 mm × 20 mm × 7 mm), size 4 (20 mm × 20 mm × 7 mm)

Side effects/adverse reactions: None reported

Contraindications: Hypersensitivity, frank infection, abnormal bleeding, to control postpartum bleeding

Precautions: Avoid use in presence of infection, potential nidus of infection, do not resterilize product

Pharmacokinetics:

IMPLANT: Absorbed in 4-6 wk

DENTAL CONSIDERATIONS

Teach patient/family:

• To immediately report any sign of infection to the dentist

acarbose

(ay'car-bose)

Precose

Drug class.: Oligosaccharide, glucosidase enzyme inhibitor

Action: Inhibits α -glucosidase enzyme in the GI tract to slow the breakdown of carbohydrates to glucose, which results in reduced plasma glucose levels

Uses: Use as single drug or in combination with other oral hypoglycemics in Type II (NIDDM) when diet control is ineffective in controlling blood glucose levels

Dosage and routes:

• **Adult:** PO initial dose 25 mg tid at start of each meal; max dose >60 kg is 100 mg tid; max dose <60 kg is 50 mg bid

Caution: All doses must be individualized for each patient

Available forms include: Tabs 50, 100 mg

Side effects/adverse reactions:

GI: Bloating, feeling of gas, diarrhea, abdominal pain

Contraindications: Hypersensitivity, diabetic ketoacidosis, cirrhosis, GI disease, impaired renal function

Precautions: Use glucose for hypoglycemia, monitor blood glucose levels, pregnancy category B, lactation, children

Pharmacokinetics: PO limited oral absorption, absorbed dose excreted in urine, major portion of dose excreted in feces and metabolized in the GI tract

Drug interactions of concern to dentistry:

• None reported; this is a new drug and information is lacking

DENTAL CONSIDERATIONS**General:**

- Ensure that patient is following prescribed diet and takes medication regularly.
- Place on frequent recall to evaluate healing response.
- Short appointments and a stress reduction protocol may be required for anxious patients.
- Patients with diabetes may be more susceptible to infection and have delayed wound healing.
- Question the patient about self-monitoring the drug's antidiabetic effect.
- Consider semisupine chair position for patient comfort when GI side effects occur.

Consultations:

- Medical consult may be required to assess disease control and patient's ability to tolerate stress.

Teach patient/family:

- Importance of good oral hygiene to prevent soft tissue inflammation

acebutolol HCl

(a-se-byoo'-toe-lole)

Monitan*, Sectral

Drug class.: Antihypertensive, selective β_1 -blocker

Action: Produces fall in BP without reflex tachycardia or significant reduction in heart rate; acts to block β_1 -adrenergic receptors; elevated plasma renins are reduced; blocks β_2 -adrenergic receptors in bronchial and vascular smooth muscle in high doses only

Uses: Mild-to-moderate hypertension and ventricular dysrhythmias; unapproved; prophylaxis of angina pectoris, myocardial infarction, and hypertrophic cardiomyopathy

Dosage and routes:**Hypertension**

- *Adult:* PO 400 mg qd or in 2 divided doses, may be increased to achieve desired response

Ventricular dysrhythmia

- *Adult:* PO dose 200 mg bid, may increase gradually until optimum response is achieved, usual range 600-1200 mg daily

Available forms include: Caps 200, 400 mg; tabs 100, 200, 400 mg (tabs Canada only)

Side effects/adverse reactions:

ORAL: Dry mouth

CNS: Insomnia, fatigue, dizziness, mental changes, memory loss, hallucinations, depression, lethargy, drowsiness, strange dreams, catatonia

CV: **Profound hypotension, bradycardia, CHF, cold extremities, postural hypotension, 2nd or 3rd degree heart block**

GI: Nausea, diarrhea, mesenteric arterial thrombosis, ischemic colitis, vomiting

RESP: **Bronchospasm**, dyspnea, wheezing

HEMA: **Agranulocytosis, thrombocytopenia**

GU: Impotence, dysuria, nocturia

EENT: Sore throat, dry burning eye

INTEG: Rash, fever, alopecia

ENDO: Hypoglycemia

Contraindications: Hypersensitivity to β -blockers, cardiogenic shock, 2nd- or 3rd-degree heart block, sinus bradycardia, CHF, cardiac failure

Precautions: Major surgery, pregnancy category B, lactation, diabetes mellitus, renal disease, thyroid disease, COPD, asthma, well-compensated heart failure, aortic or mitral valve disease

*Available in Canada only

Pharmacokinetics:

PO: Peak 2-4 hr, half-life 3-4 hr; hepatic metabolism; low protein binding; excretion of metabolites fecal; less urinary

Drug interactions of concern to dentistry:

- Decreased antihypertensive effects: NSAIDs, indomethacin
- May slow metabolism of lidocaine
- Decreased β -blocking effects (or decreased β -adrenergic effects): epinephrine, levonordefrin, isoproterenol, and other sympathomimetics
- May see increased chance of hypertension, bradycardia with epinephrine and other sympathomimetics
- Increased hypotension, myocardial depression: fentanyl derivatives, hydrocarbon general anesthetics

DENTAL CONSIDERATIONS

General:

- Monitor vital signs every appointment due to cardiovascular and respiratory side effects.
- After supine positioning, have patient sit upright for 2 or more min to avoid orthostatic hypotension.
- Patients on chronic drug therapy may rarely present with symptoms of blood dyscrasias, which can include infection, bleeding, and poor healing.
- Assess salivary flow as a factor in caries, periodontal disease, candidiasis.
- Stress from dental procedures may compromise cardiovascular function; determine patient risk.
- Short appointments and a stress reduction protocol may be required for anxious patients.
- Use vasoconstrictors with cau-

tion, in low doses, and with careful aspiration. Avoid using a gingival retraction cord with epinephrine.

Consultations:

- In a patient with symptoms of blood dyscrasias, request a medical consult for blood studies and postpone dental treatment until normal values are reestablished.
- Medical consult may be required to assess disease control and stress tolerance of patient.
- Use precautions if general anesthesia is required for dental surgery.

Teach patient/family:

- Importance of good oral hygiene to prevent soft tissue inflammation
- Caution to prevent injury when using oral hygiene aids

When chronic dry mouth occurs, advise patient:

- To avoid mouth rinses with high alcohol content due to drying effects
- To use daily home fluoride products for anticaries effect
- To use sugarless gum, frequent sips of water, or artificial saliva substitutes

acetaminophen

(a-seet-a-min'oh-fen)

Anacin-3, Arthritis Foundation Pain Reliever-Aspirin Free, Atasol*, Dapa, Datril, Liquiprin, Panadol, Robigesic*, Rounax*, Tempa, Tylenol, Valadol, and many others

Drug class.: Nonnarcotic analgesic

Action: Presumed to block the initiation of pain impulses by inhibition of prostaglandin synthesis; acts mainly in the CNS and to a

lesser degree in peripheral nerves; antipyretic action results from inhibition of prostaglandin synthesis in the hypothalamic heat-regulating center

Uses: Mild-to-moderate pain, fever; also used in combination with other ingredients, including opioids

Dosage and routes:

- *Adult and child >12 yr:* PO 325-650 mg q4h prn or 1 g q6h, not to exceed 4 g/day; REC: 325-650 mg q4-6h prn, not to exceed 4 g/day
- *Adult:* PO osteoarthritis 1 g qid
- *Child 0-3 mo:* 40 mg/dose q4h
- *Child 4-11 mo:* 80 mg/dose q4h
- *Child 1-2 yr:* PO 120 mg/dose q4h
- *Child 2-4 yr:* PO/REC 160 mg/dose q4h
- *Child 4-6 yr:* PO/REC 240 mg/dose q4h
- *Child 6-9 yr:* PO/REC 320 mg/dose q4h
- *Child 9-11 yr:* PO/REC 320-400 mg/dose q4h
- *Child 11-12 yr:* PO/REC 320-480 mg/dose q4h

Available forms include: Rec supp 120, 125, 325, 650 mg; chew tab 80, 160 mg; tabs 325, 500, 650 mg; caps 500 mg; elix 120, 160, 325 mg/5 ml; liq 160 mg/5 ml, 500 mg/15 ml; sol (infant drops) 100 mg/1 ml, 120 mg/2.5 ml

Side effects/adverse reactions:

CNS: Stimulation, drowsiness

GI: **Hepatotoxicity**, nausea, vomiting, abdominal pain

HEMA: **Leukopenia, neutropenia, hemolytic anemia** (long-term use), **thrombocytopenia, pancytopenia**

INTEG: **Angioedema**, rash, urticaria

TOXICITY: **Cyanosis, anemia, neutropenia, jaundice, pancytopenia,**

CNS stimulation, delirium; then vascular collapse, convulsions, coma, death

Contraindications: Hypersensitivity

Precautions: Anemia, hepatic disease, renal disease, chronic alcoholism, pregnancy category B

Pharmacokinetics:

PO: Onset 10-30 min, peak 0.5-2 hr, duration 4-6 hr, half-life 1-3 hr
REC: Slow, variable onset

For all routes, is metabolized in the liver, excreted by the kidneys, crosses the placenta, and found in breast milk

Drug interactions of concern to dentistry:

- Decreased effects: barbiturates
- Nephrotoxicity: NSAIDs, salicylates (chronic, high dose concurrent use)

Buffered acetaminophen:

- Decreased absorption of tetracycline

When prescribed for dental pain:

- Increased bleeding (chronic, high doses over 2 g/day): oral anticoagulants

DENTAL CONSIDERATIONS

General:

- Avoid prolonged use with aspirin-containing products.
- Determine why the patient is taking the drug.
- Patients on chronic drug therapy may rarely present with symptoms of blood dyscrasias, which can include infection, bleeding, and poor healing.

Consultations:

- In a patient with symptoms of blood dyscrasias, request a medical consult for blood studies, and postpone dental treatment until normal values are reestablished.

acetazolamide/ acetazolamide sodium

(a-set-a-zole' a-mide)

Acetazolam*, Ak-Zol, Apo-Acetazolamide*, Dazamide, Diamox

Drug class.: Diuretic; carbonic anhydrase inhibitor

Action: Inhibits carbonic anhydrase activity in proximal renal tubular cells to decrease reabsorption of water, sodium, potassium, bicarbonate; decreases carbonic anhydrase in CNS, increasing seizure threshold; able to decrease aqueous humor in eye, which lowers intraocular pressure

Uses: Open-angle glaucoma, narrow-angle glaucoma (preoperatively, if surgery delayed), epilepsy (petit mal, grand mal, mixed), edema in CHF, drug-induced edema, acute altitude sickness

Dosage and routes:

Closed-angle glaucoma

• **Adult:** PO/IM/IV 250 mg q4h, or 250 mg bid, to be used for short-term therapy; ext rel 500 mg bid

Open-angle glaucoma

• **Adult:** PO/IM/IV 250 mg to 1 g/day in divided doses for amounts over 250 mg

Available forms include: Tabs 125, 250 mg; sus rel caps 500 mg; inj IM/IV 500 mg

Side effects/adverse reactions:

ORAL: Dry/burning mouth, tongue, lips; paresthesia; metallic taste; thirst

CNS: Drowsiness, paresthesia, anxiety, depression, headache, dizziness, confusion, stimulation, fatigue, seizures, sedation, nervousness

GI: Nausea, vomiting, anorexia,

hepatic insufficiency, constipation, diarrhea, melena, weight loss

HEMA: Aplastic anemia, hemolytic anemia, leukopenia, agranulocytosis, thrombocytopenia, purpura, pancytopenia

GU: Frequency, hypokalemia, uremia, polyuria, glucosuria, hematuria, dysuria

EENT: Myopia, tinnitus

INTEG: Rash, Stevens-Johnson syndrome, photosensitivity, pruritus, urticaria, fever

ENDO: Hyperglycemia

Contraindications: Hypersensitivity to sulfonamides, severe renal disease, severe hepatic disease, electrolyte imbalances (hyponatremia, hypokalemia), hyperchloremic acidosis, Addison's disease, long-term use in narrow-angle glaucoma, COPD

Precautions: Hypercalciuria, pregnancy category C

Pharmacokinetics:

PO: Onset 1-1.5 hr, peak 1-3 hr, duration 6-12 hr

PO(SUS REL): Onset 2 hr, peak 8-12 hr, duration 18-24 hr

IV: Onset 2 min, peak 15 min, duration 4-5 hr

65% absorbed if fasting (oral), 75% absorbed if given with food; half-life 2.5-5.5 hr; excreted unchanged by kidneys (80% within 24 hr); crosses placenta

Drug interactions of concern to dentistry:

- Toxicity: salicylates (large doses)
- Hypokalemia: corticosteroids (systemic use)
- Crystalluria: ciprofloxacin

DENTAL CONSIDERATIONS

General:

• Patients on chronic drug therapy may rarely present with symptoms of blood dyscrasias, which can in-

clude infection, bleeding, and poor healing.

- Assess salivary flow as a factor in caries, periodontal disease, and candidiasis.
- Avoid drugs that may exacerbate glaucoma (e.g., anticholinergics).

Consultations:

- In a patient with symptoms of blood dyscrasias, request a medical consult for blood studies and postpone dental treatment until normal values are reestablished.
- Consult may be required to assess disease control in patient.

Teach patient/family:

- Importance of good oral hygiene to prevent soft tissue inflammation
- Caution to prevent injury when using oral hygiene aids

When chronic dry mouth occurs, advise patient:

- To avoid mouth rinses with high alcohol content due to drying effects
- To use daily home fluoride products for anticaries effect
- To use sugarless gum, frequent sips of water, or artificial saliva substitutes

acetoexamide

(a-set-oh-hex'a-mide)

Dimelor*, Dymelor

Drug class.: Sulfonyleurea (1st generation); antidiabetic

Action: Causes functioning β -cells in pancreas to release insulin, leading to drop in blood glucose levels; may improve binding between insulin and insulin receptors or increase number of insulin receptors; not effective if patient lacks functioning β -cells

Uses: Stable adult-onset diabetes mellitus (Type II), NIDDM

Dosage and routes:

- **Adult:** PO 250 mg-1.5 g/day; usually given before breakfast, unless large dose is required, then dose is divided in two

Available forms include: Tabs 250, 500 mg scored

Side effects/adverse reactions:

CNS: Headache, weakness, tinnitus, fatigue, dizziness, vertigo

GI: Hepatotoxicity, jaundice, heartburn, nausea, vomiting, diarrhea

HEMA: Leukopenia, thrombocytopenia, agranulocytosis, aplastic anemia, hemolytic anemia, increased AST/ALT, alk phosphatase

INTEG: Rash, allergic reactions, pruritus, urticaria, eczema, photosensitivity, erythema

ENDO: Hypoglycemia

Contraindications: Hypersensitivity to sulfonyleureas, juvenile or brittle diabetes

Precautions: Pregnancy category C, elderly, cardiac disease, renal disease, hepatic disease, thyroid disease, severe hypoglycemic reactions

Pharmacokinetics:

PO: Onset 1 hr, peak 2-4 hr, duration 12-24 hr, half-life 6-8 hr; completely absorbed by GI route; metabolized in liver; excreted in urine (active metabolites, unchanged drug)

Drug interactions of concern to dentistry:

- Increased hypoglycemic effects: salicylates (large doses), NSAIDs, ketoconazole, miconazole
- Decreased action: corticosteroids
- Disulfiram-like reaction: alcohol

DENTAL CONSIDERATIONS

General:

- Monitor vital signs every ap-

*Available in Canada only