

DRUGS IN CURRENT USE
AND NEW DRUGS

1976

Edited by
WALTER MODELL, M.D.

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AND **NEW DRUGS**

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1976

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P R E F A C E

In this twenty-second edition of *Drugs in Current Use* the change in format initiated with the fifteenth edition, and which has proved successful, has been continued. Part I still consists of an alphabetical listing of drugs currently in use in clinical medicine: well-established drugs; new ones still on trial; old ones of questionable value but still likely to be encountered; some that are seen only as the cause of poisoning; some that have recently been withdrawn because of their toxicity but are still encountered in the literature; and some that are obsolete. Inclusion of a drug in this book is not to be taken as a recommendation but merely as a statement of the fact that it is being used or written about.

Part II gives special attention to drugs that have recently been introduced on the commercial drug market. These new drugs are given concise but more extensive, descriptions than those included in Part I because of the relative difficulty in getting detailed information about them. These accounts contain details about the new drugs, their dangers, limitations, and uses. Drugs that were described in Part II of the 1975 edition will now be found briefly described in Part I. Drugs in Part II of this edition will be much more briefly mentioned in Part I in the 1977 edition.

The purpose of Part I remains the same as in previous editions: to provide a useful, concise statement concerning drugs in current use and, in the case of well-established and well-understood drugs, of their major uses; their physical properties; absorption; actions, both therapeutic and toxic; modes of administration; preparations; specific antidotes against poisoning when these are available—a capsule account of the essential data. In some cases special warnings are noted which draw attention not only to dangerous reactions, contraindications, and questionable utility, but also to instability, special requirements for storage and prevention of deterioration, and to time limits before significant loss in potency or changes in pharmacologic properties. In order to accomplish this in a compact form, the writing is terse and sentences are often incomplete. Very brief statements follow less commonly used or relatively untested drugs.

When the properties of one drug are identical or very similar to those of another, the reader may be referred to the latter. In order to keep the book at its present convenient size and still deal with the large number of new drugs,

reference is often made to remarks on old and well-established drugs in cases where they apply to new congeners. In the case of new drugs a definitive statement is usually deferred because it ordinarily takes more than five years of widespread use for the deserved position of a drug in therapy to be established.

Usually only the drug principle is indicated; separate listings are rarely made of salts of the same basic drug. This is done to save space and to avoid useless repetition since the actions of drugs attach to their principle, and their salts usually differ only in physical properties, such as solubility. Thus, the alkaloidal form of morphine is listed and there is no separate listing for the more commonly used soluble salt, the sulfate. Where practical differences do exist, the different forms are listed and described under the heading of the principle rather than separately.

Drugs are described under non-proprietary names. Because of widespread usage, the more common proprietary names and synonyms are usually included, but their listing is not complete. Many arbitrary decisions had to be made, and it was usually on the basis of the editor's judgment and personal experience that some proprietary names for a drug are omitted and others included. Proprietary names are followed by the symbol®. Only the terminology that is official in the United States is used.

In a compact book such as this, it is not possible to list all medicaments on the American market. Many are utterly irrational and others so complex as to defy sensible evaluation. Only single chemical drugs are usually considered in the text. With a few notable exceptions, such as some of the oral contraceptives, mixtures were deliberately avoided, since they are both excessive in number and impossible to categorize. As a result, only a few of the vast number of mixtures on the market are included. Immunologic agents such as the antigens, allergenic extracts, vaccines, toxins, toxoids, antitoxins, etc., are not included. Radioactive agents which are used only by the specialist are excluded. For the same reason, contrast media used only for the taking of x-rays have also been removed. Many general anesthetics have been omitted because their use is both highly technical and highly specialized. Foods and food supplements and nutritional adjuvants are also excluded. Solvents, vehicles, coloring substances, flavorings, emulsifying agents, and other pharmaceutical materials used in making up medicaments but without pharmacologic action themselves have been omitted to conserve space.

It must be emphasized that where dosage is indicated a single value cannot apply to all patients. The dose given is the usual dose for an adult but the range of useful dosage is far broader and limited mainly by the toxic propensities of the drug and the tolerance of the patient receiving it. When a drug is relatively new, little can be said about the safe as well as the effective dosage range—much experience is needed to determine how to exploit a drug therapeutically without danger. With this in mind the manufacturers of new drugs put them out in fixed forms which tend, in general, to be in the lower and safer range of dosage for the average adult. It is for these reasons that the size of the dosage forms available is given, whereas there may be no further statement on dosage. Such drugs are all listed alphabetically in this book, the text itself constitutes an index; therefore, there is no need for a special traditional type of index.

Many sources were used in compiling this list: the United States Pharmacopoeia, package inserts for new drugs, and the National Formulary. Con-

stant perusal of the current literature and even drug advertisements were important in keeping this list up to date. From time to time, comments obviously based on personal opinions are to be found in the text; these may be attributed to the editor. With each new edition many items are revised or dropped. Names have been changed to correspond to U.S. Adopted Names (USAN) and, as far as possible, all really new drugs added to the commercial market before the publication deadline of this edition have been listed.

New York
December, 1975

Walter Modell, M.D.

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Part I

DRUGS IN CURRENT USE

A

AARANE® , see Cromolyn

ACENOCOUMAROL—Sintrom®

Anticoagulant. One of the coumarin derivatives, said to have a curve of action between that of bishydroxycoumarin and ethyl biscoumacetate.

Administration: Oral.

Preparation: Tablet, 4 mg.

ACETAMINOPHEN—Apamide® , Fendon® , Tempra® , Tylenol® , Val Dol®

Analgesic. A nonaddictive analgesic.

Preparations: Tablet, 3 Gm.; liquid, 25 mg. per ml.

ACETANILID

Analgesic and antipyretic. White powder, slightly soluble in water. Little used.

Actions and Uses: Although it has antipyretic actions and will reduce temperature, it is mainly used as an analgesic, often in headache remedies and similar mixtures. Little used.

Warning: Its continued use may lead to the development of methemoglobinemia.

Administration: Oral.

Preparations: Tablet and powder.

ACETARSONE—Stovarsol®

Antiprotozoal. White or yellowish powder, slightly soluble in water. Arsenical.

Actions and Uses: Used to destroy parasites in amebiasis and trichomonas vaginalis.

Warning: In common with other arsenicals, may damage kidneys or liver.

Administration: Oral, vaginal insufflation.

Preparations: Tablet, 50, 100, 250 mg. Powder, contains acetarsone, 12.5%, in kaolin and sodium bicarbonate.

Antidote: Dimercaprol.

ACETAZOLAMIDE—Diamox®

Diuretic. White powder, soluble in water.

Actions and Uses: Diuretic; used also in the treatment of glaucoma to reduce intraocular pressure.

Warnings: Paresthesias of fingers and toes are common with use but these often disappear while the drug is continued. Agranulocytosis has been reported.

Administration: Oral, parenteral.

Preparations: Tablet, 250 mg. Vials, 500 mg.

ACETIC ACID

Caustic and rubefacient. Clear, colorless solution containing about 36.5% acetic acid. Has odor of vinegar and a sharp acid taste.

Actions and Uses: Used as a caustic and rubefacient and as antidote to alkali.

Administration: Topical.

Preparations: Glacial acetic acid contains about 99.5% acetic acid, the diluted acetic acid contains about 6%.

ACETOHEXAMIDE—Dymelor®

Oral hypoglycemic. Much like other oral substitutes for insulin. Available in 500 mg. tablets.

ACETOPHENAZINE—Tindal®

Tranquilizer.

Administration: Oral.

Preparation: Tablet, 20 mg.

ACETOPHENETIDIN, see Phenacetin

ACETPYROGALL—Lenigallol®

Caustic. White powder insoluble in water.

Actions and Uses: Liberates pyrogallol slowly, producing painless corrosion.

Administration: Topical.

Preparations: Powder and ointment; usually in 5 to 10% concentration.

ACETYLCARBROMAL—Carbased®

Tranquilizer.

Administration: Oral.

Preparation: Tablet, 0.3 Gm.

ACETYLCYSTEINE—Mucomyst®

Mucolytic agent. Suggested for reduction of viscosity of bronchopulmonary mucus. Advantages over other agents yet to be established.

Administration: Nebulization or direct instillation.

Preparation: Vial containing 20% solution.

ACETYLDIGITOXIN—Acyland®

Cardiac stimulant. Crystalline digitalis material derived from *Digitalis lanata*. Differs from digitoxin in more rapid curve of action and incomplete absorption; but in no real sense less toxic.

ACETYLPHENYLHYDRAZINE

Red cell depressant. Crystalline material, slightly soluble in water. Little used.

Action and Uses: Depresses formation of red blood cells, and is used for that purpose in treatment of polycythemia vera.

Warnings: Depression of red cell formation may be excessive, and all blood formation may be inhibited. Slowly eliminated, tends to be cumulative.

Administration: Oral.

Preparation: Capsule, 100 mg.

ACETYLSALICYLIC ACID—Aspirin,

Ecotrin®, and under many other trade names

Analgesic and antipyretic. Crystalline material which is slightly soluble in water.

Actions and Uses: Has entirely nonspecific antipyretic action, relieving all kinds of abnormally elevated temperatures, without effect on the cause of the temperature. In small doses which do not produce behavior changes, it relieves many of the minor aches and pains, headaches, myalgias, arthralgias, neuralgias and dysmenorrhea. It affords good

relief in the exquisite joint pains of rheumatic fever. In this condition, it is used in relatively large doses which cause symptoms simulating cinchonism. Its use in rheumatic fever often provides relief, not only from the pain, but also the joint swelling. It has no curative action, however. In part, at least, its effects may be due to an anti-inflammatory action. Effects of the drug develop fully in about 30 minutes after an oral dose.

Warnings: Gastrointestinal distress, due to irritation, is common after large doses. Also seen are symptoms of cinchonism: dizziness, ringing in the ears, impaired hearing, headache. Serious poisoning may induce acidosis; gastrointestinal bleeding and ulcer may develop in susceptible individuals. Large doses may also depress the blood clotting mechanism and cause bleeding. It is a common cause of very serious poisoning in children and infants.

Administration: Oral.

Preparation: Tablet, 0.3 Gm.

Antidote: Sodium bicarbonate to hasten elimination. Vitamin K or one of its synthetic substitutes for hypoprothrombinemia Exchange transfusions have been effective in severe cases of poisoning.

ACETYL SULFISOXAZOLE—Gantrisin

Acetyl®

The acetylated form of the drug is said to have all the antibacterial and physical properties of sulfisoxazole (Gantrisin®) but, in addition, to be especially free of intestinal irritant action and to be tasteless so that it is easily flavored for use in pediatric cases. Dosage of the same order as sulfisoxazole.

ACHROMYCIN®, see Tetracycline

ACIBAN®, see Calcium Caseinate

ACIDORIDE®, See Glutamic Acid Hydrochloride

ACID SODIUM PHOSPHATE, see Sodium Biphosphate

ACIDULIN®, see Glutamic Acid Hydrochloride

ACRIFLAVINE

Antiseptic dye. Orange powder, freely soluble in water. Little used.

Administration: Topical. Usually used in solution of from 1:1000 to 1:10,000 dilution.

ACRISORCIN—Akrinol®

Fungicide. For topical use.

Preparation: Cream, 2 mg. per Gm.

ACRIZANE®, see Phenacridane**ACTASE**®, see Fibrinolysin**ACTH**, see Corticotropin**ACTHAR**®, see Corticotropin**ACTHAR GEL**®, see Corticotropin**ACTIDIL**®, see Triprolidine**ACTOSPAR**®, see Sparteine**ACYLANID**®, see Acetyldigitoxin**ADALIN**®, see Carbromal**ADANON**®, see Methadone**ADAPIN**®, see Doxepin**ADEMOL**®, see Flumethiazide**ADIPHENINE**—Trasentine®

Anticholinergic. White powder. The hydrochloride is soluble in water.

Actions and Uses: Much the same effect on parasympathetic system as atropine and, hence, much the same uses and dangers. Said to have less mydriatic action than atropine.

Warning: May produce mydriasis or glaucoma in sensitive patients.

Administration: Oral, rectal, intramuscular.

Preparations: Tablet, 75 mg. Ampule, 50 mg. in 1.5 cc. Suppository, 100 mg.

ADRENAL CORTEX EXTRACT

Hormone. Hormone solution obtained from the adrenal glands of cattle.

Actions and Uses: May be used to replace missing cortical substances in Addison's disease or in any situation of cortical insufficiency. Rarely used today, largely replaced

by the corticosteroids and mainly of historic interest.

Preparations: Sterile injectable saline solution, free of fat and the epinephrine of the adrenals, containing only the cortical steroids. Vial, 50 Units per cc.

ADRENALIN®, see Epinephrine**ADRENOCORTICOTROPIC HORMONE**, see Corticotropin**ADRENOSEM SALICYLATE**®, see Carbazochrome Salicylate**ADRIAMYCIN**®, new drug; see Doxorubicin Hydrochloride in Part II for details.**ADROYD**®, see Oxymetholone**AEROSOL PENETRATION CREAM**

Creamy white ointment, readily miscible with water and easily removed from the skin by washing.

Actions and Uses: Used as a base for dermatologic drugs, in which penetration through the skin is needed. The cream penetrates hair follicles and pores.

AEROSPORIN®, see Polymyxin B**AFRIN**®, see Oxymetazoline**AGAR**

Cathartic. Mucilaginous substance extracted from seaweeds. White, odorless and tasteless.

Actions and Uses: Swells when treated with water, absorbing and retaining water as it passes through the intestinal tract. It thus stimulates peristaltic activity.

Administration: Oral.

AKINETON®, see Biperiden**AKRINOL**®, see Acrisorcin**ALBAMYCIN**®, see Novobiocin**ALBUMIN**—Serum Albumin (Human), Albumisol®

Serum component of human blood. Clear brownish viscous liquid.

Actions and Uses: Raises the serum albumin content of the blood in hypoproteinemia.

Administration: Intravenous.

Preparation: Sterile solution of various concentrations, 5% in normal and 25% in salt-poor form.

ALBUMISOL® , see Albumin

ALCOHOL—Ethyl Alcohol

Solvent, rubefacient, astringent and antiseptic. Colorless, clear fluid containing about 95% of pure alcohol. Inflammable. Has characteristic odor and taste. Is miscible with water, ether, chloroform and acetone.

Actions and Uses: Applied to the skin, alcohol cools by evaporation and has a hardening or astringent action. It is an antiseptic at the concentration of 70% by weight. As an antiseptic, it requires time for action; after application, therefore, alcohol should be allowed to dry on the skin. Taken internally, it is quickly absorbed producing symptoms of intoxication. With this action, it has a sedative effect on some, it stimulates appetite in others, causes excitement in others and depression in still others. It is often difficult to anticipate the dosage necessary to produce an effect or the precise effect which may be produced unless one has had previous experience with the patient. Alcohol is completely metabolized in the body, providing a caloric content of about 225 calories per ounce. For this reason, alcoholic beverages tend to be fattening. It is also an important fact that alcoholics do not eat much of other foods, and the symptoms of alcoholic nutritional deficiencies are, in part, due to this action of alcohol.

Warnings: Alcohol produces narcosis, and, if the dosage is very large, may even cause death. Sudden withdrawal in chronic alcoholics may result in severe symptoms.

Administration: Topical, oral, intravenous.

ALCOPARA® , see Bephenium

ALDACTONE® , see Spironolactone

ALDARSONE® , see Phenarson

ALDINAMIDE® , see Pyrazinamide

ALDOMET® , see Methyl dopa

ALEVAIRE® , see Tyloxapol

ALFLORONE® , see Fludrocortisone

ALGLYN® , see Dihydroxyaluminum Aminoacetate

ALIDASE® , see Hyaluronidase

ALKAGEL® , see Aluminum Hydroxide Gel

ALKERAN® , see Melphalan

ALLERCUR® , see Clemizole

ALLOBARBITAL—Dial®
An intermediate acting barbiturate.
Preparation: Tablet, 30 and 100 mg.

ALLOPURINOL—Zyloprim®
Gout Therapy.
Administration: Oral.
Preparation: Tablet, 100 mg.

ALLYLBARBITAL—Sandoptal®
Rapid acting barbiturate.
Preparation: Tablet, 0.2 Gm.

ALMOND OIL, EXPRESSED—Sweet Almond Oil

Emollient. Oil obtained from the kernels of several varieties of almond and related fruits. Clear, straw-colored or almost colorless, and odorless. It is miscible with ether, chloroform and benzene.

Actions and Uses: Used for its emollient action on the skin.

Warning: Do not use if rancid.

ALOE—Aloes

Cathartic. Yellow or brown powder obtained from the dried juices of the leaves of several species of aloe.

Actions and Uses: Mild cathartic, acting mainly on the large intestine.

Warning: Large doses may produce renal irritation.

Administration: Oral.

ALOES, see Aloe

ALOIN

Cathartic. Light yellow powder, having a slight odor but an intensely bitter taste. Soluble in water and alcohol.

Actions and Uses: Used as a mild cathartic.

Warning: Large doses may produce renal irritation.

Administration: Oral.

ALPEN® , see Phenethicillin

ALPHA AMYLASE—Buclamase® ,
Fortizyme®

Anti-inflammatory enzyme. Usefulness is still not established.

Administration: Oral.

Preparation: Tablet containing 1250 Rystan units.

ALPHADROL® , see Fluprednisolone

ALPHAPRODINE—Nisentil®

Synthetic narcotic. Recommended as an analgesic with claims of rapid action, reduced incidence of nausea, vomiting, respiratory depression as compared with morphine. Much the same as Meperidine, which see.

Administration: Subcutaneous, intramuscular.

Preparation: Ampule, 40 and 60 mg.

Antidote: Nalorphine.

alphaREDISOL® , see
Hydroxocobalamine

ALSEROXYLON—Rau-Tab® ,
Rauwiloid®

A purified extract of rauwolfia. Available in 2 mg. tablets.

AL-U-CREME® , see Aluminum
Hydroxide Gel

ALUDRINE® , see Isoproterenol

ALUDROX® , see Magnesium and
Aluminum Hydroxide Mixture

ALUM

Astringent and hemostatic. Colorless crystals, fragments or a white powder.

Actions and Uses: Chemically, alum may be aluminum ammonium sulfate or aluminum potassium sulfate. Strongly astringent, used as a styptic and hemostatic. May be used as a gargle.

Warning: Somewhat injurious to the teeth when used as a gargle.

Administration: Topical.

ALUMINUM ACETATE

Astringent.

Actions and Uses: Used mainly in Burow's solution as an astringent. Burow's solution contains about 5% of the aluminum acetate.

Administration: Topical.

**ALUMINUM AND MAGNESIUM
HYDROXIDE MIXTURE**—Aludrox® ,
Creamalin® , Maalox®

Non-constipating antacid. Available in 0.5 Gm. tablets and in suspension.

ALUMINUM CARBONATE—Basaljel®

A form of aluminum gel. Used as an antacid, with actions similar to aluminum hydroxide gel.

ALUMINUM HYDROXIDE GEL—

Alkagel® , Amphojel® , Al-U-Creme®
Antacid. Suspension, containing approximately 4% of aluminum hydroxide.

Actions and Uses: Used as an alkali for relieving hyperchlorhydria, relieving pain by neutralizing approximately 20 volumes of gastric hydrochloric acid. It does not tend to cause "rebound acidity." It reduces the formation of certain types of kidney stones.

Warnings: Prolonged use may interfere seriously with calcium absorption. Impaction of the gel in intestinal tract may cause obstipation or obstruction.

Administration: Oral.

Preparations: Liquid gel.; tablet 0.6 Gm. of the aluminum hydroxide.

ALUMINUM NICOTINATE—Nicalex®

Same actions as nicotinic acid. No advantages over it have been established.

Administration: Oral.

Preparation: Tablet containing the equivalent of 500 mg. nicotinic acid.

ALUMINUM PENICILLIN

A slowly absorbed form of penicillin G. See Penicillin.

ALUMINUM PHOSPHATE GEL—

Phosphalgel®

Antacid. White, viscous suspension.

Actions and Uses: These are much the same as with the aluminum hydroxide gel, except that it provides phosphate in conditions in which this may be deficient.

Preparation: Suspension, 40 mg. per ml.

ALUPENT® , see Metaproterenol

ALURATE® , see Aprobarbital

ALVERINE—Spacolin®

Antispasmodic.

Administration: Oral.

Preparation: Tablet, 120 mg.

ALVININE® , see Biphennamine

ALVODINE® , see Piminodine

ALZINOX® , see Dihydroxy-aluminum
Aminoacetate

AMANTADINE—Symmetrel®

Influenza prophylactic. There is evidence that this drug tends to prevent influenza, but none that is useful in its treatment. Taken from 10 to 30 days after exposure to influenza. Recently shown to have some beneficial effects in Parkinson's disease.

Preparations: Capsule 100 mg., syrup, 10 mg. per ml.

AMBENONIUM—Mytelase®

Cholinergic. Suggested for myasthenia gravis. Dosage of the order of 5 to 25 mg. orally although considerably more may sometimes be necessary.

AMBODRYL® , see
Bromodiphenhydramine

AMBUTONIUM

Anticholinergic.

Administration: Oral.

Preparation: Tablet 10 mg.

AMCILL® , see Ampicillin

AMETHONE® , see Amolanone

AMICAR® , see Aminocaproic acid

AMIDOPYRINE, see Aminopyrine

AMINITROZOLE—Tritheon®

Anticholinergic.

Administration: Oral.

Preparation: Tablet 10 mg.

AMINOACETIC ACID—Glycocoll,
Glycine

Nutritional. Amino acid.

Actions and Uses: May serve as a food. It was once thought that this amino acid might be a special and rapid source of energy and this was the basis of a fad for its use. Exerts a buffering action and may be used as an antacid as such, but usually with calcium carbonate.

Administration: Oral.

AMINOCAPROIC ACID—Amicar®

Systemic blood coagulant. For use in excessive bleeding from systemic hyperfibrinolysis and urinary fibrinolysis. A relatively dangerous drug; use with caution.

Administration: Oral, intravenous.

Preparations: Vial, 5 Gm. in 20 ml. for intravenous use; tablet, 500 mg. and syrup 250 mg. per ml. for oral use.

AMINOGLUTETHIMIDE—Elipten®

Anticonvulsant.

Preparation: Tablet, 250 mg.

AMINOPENTAMIDE—Centrine®

Anticholinergic. Has much the same actions and dangers as atropine.

Preparation: Tablet, 0.5 mg.; liquid, 0.75 mg. per ml.

AMINOPHYLLINE—Theophylline

Ethylenediamine

Diuretic, antispasmodic, respiratory stimulant. White or yellowish powder with a bitter taste. Relatively soluble in water.

Actions and Uses: Sometimes used to dilate the coronary arteries in coronary thrombosis and insufficiency. It is also used to relax the bronchial musculature in asthmatic attacks. It is diuretic, acting on the kidney to increase the rate of urine formation; a feeble respiratory stimulant.

Warnings: Given intravenously too rapidly, it may produce circulatory collapse. Given by mouth, gastrointestinal distress is common.

Administration: Oral, intramuscular, intravenous, rectal.

Preparations: Tablet, 0.2 Gm. Solution. Intramuscular preparation is far too concentrated to be given safely intravenously. Suppository.

AMINOPYRINE—Pyramidon®,

Amidopyrine

Analgesic and antipyretic. White crystals.

Actions and Uses: Analgesic and antipyretic, somewhat more potent than aspirin.

Warnings: In hypersensitive individuals, this drug and closely related drugs may cause serious and even fatal leukopenia and agranulocytosis. This condition may develop suddenly and without warning in patients who have taken the drugs previously without ill effect. Since there are usually many other drugs which can be easily substituted there is rarely any indication for this drug. On the other hand, it is important to determine whether new drugs are chemically related to aminopyrine. Closely related to phenylbutazone (Butazolidin®), and dipyrone (Narone®, Nortate®, Novaldin®) which share all its dangers.

Administration: Oral.

Preparation: Tablet, 0.2, 0.3 Gm.

AMINOSALICYLIC ACID, see

Para-Aminosalicylic Acid

AMITRIPTYLINE—Elavil®

Psychic stimulant. Often takes a week or longer to take effect.

Administration: Oral, subcutaneous.

Preparations: Tablet, 25 mg.; injection, 10 mg. per cc.

AMMONIA

Stimulant. A highly irritant caustic vapor, which dissolves easily in water. Characteristic odor. Strongly alkaline.

Actions and Uses: Ammonia spirit is used for its fleeting action as a respiratory and circulatory stimulant, usually in cases of fainting.

Warning: The solutions and vapors are highly irritant.

Administration: Inhalation.

Preparations: Ammonia solution, diluted, 10% solution in water. Ammonia solution, strong, 28% solution in water. Aromatic ammonia spirit, mixture containing about 2% of free ammonia with alcohol and aromatic oils.

AMMONIATED MERCURY—White

Precipitate

Local antiseptic. White powder.

Actions and Uses: Used externally as an antiseptic in infections of the skin.

Warnings: Toxic; do not apply too liberally. Excessive use may be irritant and may cause a dermatitis.

Administration: Topical.

Preparations: Cream, ointment with wax, petrolatum and other greasy or non-greasy bases. Mixed with salicylic acid and other drugs in skin ointments.

AMMONIUM ACETATE

Diaphoretic. Colorless or white crystals, slightly soluble in water.

Actions and Uses: Diaphoretic and diuretic drug of doubtful value and infrequently used.

Warning: Overdosage may lead to acidosis.

Administration: Oral.

Preparation: Solution: Contains about 7% ammonium acetate and small amounts of acetic acid.

AMMONIUM CARBONATE

Liquefying expectorant. Hard white or translucent masses having a strong ammoniacal odor and taste. It deteriorates on standing, losing ammonia and becoming opaque.

Actions and Uses: It is a nauseant, liquefying expectorant. Sometimes used as a reflex stimulant in "smelling salts" because of the free ammonia it gives off.

Warning: Strong alkali and irritant.

Administration: Oral.

Preparations: Tablet, pure ammonium carbonate. Aromatic spirit of ammonia, contains about 2% of ammonia, alcohol and aromatic oils. Mixture, cough medicines and expectorants.

AMMONIUM CHLORIDE

Diuretic, acidifier and expectorant. Colorless or white crystals, with a cool or salty taste. Soluble in water.

Actions and Uses: It is an irritant and nauseant. In common with all nauseants, it encourages bronchial secretion, hence used as an expectorant. In the body, it is changed into urea and free hydrochloric acid. The hydrochloric acid liberates sodium from the tissues, thus acting as a diuretic and increasing the rate of urine flow, and at the same time also acidifying the urine. Often used in conjunction with other diuretics, whose action it may intensify.

Warnings: Gastrointestinal irritant with

nausea and vomiting. Acidosis may occur in cases with poor renal function.

Administration: Oral.

Preparations: Tablet, 0.5 Gm., enteric coated. Mixture, with cough medicines.

AMMONIUM HYDROXIDE, see

Ammonia

AMMONIUM MANDELATE

Urinary antiseptic.

Actions and Uses: This is a form of mandelate which tends to acidify the urine. See Mandelic Acid.

Warning: Excessive dosage may cause renal irritation and gastrointestinal upset.

Administration: Oral.

Preparations: Tablet; syrup for children.

AMNESTROGEN® , see Estrogenic Substances, Conjugated

AMOBARBITAL—Amytal®

Hypnotic. White crystalline powder, insoluble in water, usually the soluble sodium salt. Bitter taste.

Actions and Uses: Short-acting hypnotic and sedative, similar to barbitol and phenobarbital, but with effects which develop more rapidly and which are eliminated more rapidly. Used to control insomnia and anxiety, and as a preliminary to surgical anesthesia.

Warnings: Overdosage may lead to narcosis and death. Regular use may lead to habituation. Abrupt withdrawal may lead to convulsions.

Administration: Oral, intravenous, intramuscular.

Preparations: Tablet, 50, 100 mg. Capsule, 0.065, 0.2 Gm.—sodium salt, is usually identified by a blue-colored capsule. Elixir, contains alcohol, coloring matter and flavoring matter, with about 25 mg. Amytal per teaspoonful. Ampule, 0.25 and 0.5 Gm., to be dissolved before injection, into a 2% solution. *Antidote:* Picrotoxin

AMODIAQUIN—Camoquin®

Antimalarial. The hydrochloride.

Actions and Uses: Much the same as chloroquine, which see.

Preparation: Tablet, 200 mg.

AMOLANONE—Amethone®

Topical anesthetic. Recommended for urologic diagnostic procedures.

AMOPYROQUIN—Propoquin®

Antimalarial. The hydrochloride. Closely related to chloroquine.

Actions and Uses: The same as chloroquine.

Dangers: The same as for chloroquine.

AMOXICILLIN—Larotid®, Amoxil®, Polymox®

Synthetic antibiotic. An analog of ampicillin.

Actions and Uses: Antibacterial action similar to that of ampicillin. Rapidly absorbed, diffusing into most body tissues and fluids with the exception of the brain and spinal cord when the meninges are inflamed.

Indicated in treatment of infections caused by alpha and beta hemolytic streptococci, *Diphlococcus pneumoniae*, non-penicillase producing staphylococci, *Streptococci faecalis*, *Hemophilus influenzae*, *E. coli*, *Proteus mirabilis*, and *Neisseria gonorrhoeae*.

Warnings: Contraindicated in patients allergic to penicillin. Serious and often fatal hypersensitivity reactions may occur; these require immediate emergency treatment.

Other untoward reactions include nausea, vomiting, diarrhea, anemia, thrombocytopenia, thrombocytopenic purpura, eosinophilia, leukopenia, agranulocytosis.

During prolonged therapy, periodic assessment of renal, hepatic, and hematopoietic function are required.

Safety for use in pregnant women not established.

Administration: Oral, usually in divided doses that are based on the organism involved, the severity of the infection, and the patient's age. Treatment for weeks, with frequent bacteriologic and clinical appraisals, may be needed in cases of stubborn urinary tract infection. May be administered without regard to meals.

Preparation: Capsule, 250 mg.; oral suspension, 5 ml. of reconstituted suspension contains 125 or 150 mg. amoxicillin; pediatric drops, each ml. of reconstituted suspension contains 50 mg. amoxicillin.

AMPHEPROXYN®, see Methamphetamine