A prescription for taking medicine properly

MARGARET REICH
Senior Staff Editor

A spoonful of sugar may indeed help the medicine go down, but the combination could render the desired treatment useless. Taking prescription drugs with certain foods is only one mistake that can be attributed to the misuse of more than half of the 1.6 billion prescriptions written annually in this country. Smoking, drinking alcohol, stopping treatment early or taking medications at the wrong time, and mixing different prescription drugs together, or with over-the-counter (OTC) agents all contribute to this, our nation's other drug problem.

Identifying the "misusers"...

A recent study sponsored by a major pharmaceutical company found younger persons, age 18-24, did not follow the doctor's orders. On the other hand, 81% of elderly patients did. Overall, men proved less compliant when it came to taking their medicine correctly than women. Surprisingly, better educated persons with higher incomes were less likely to follow instructions than their lower paid, lesser educated counterparts.

Why do so many people not take medicine as prescribed? Feeling better, forgetting to fill the prescription, worrying about side effects or other drug interactions, and questioning the drug's effectiveness are frequently cited reasons for noncompliance. Additional problems, such as difficulty opening child-resistant bottles, can compound drug misuse, especially among the elderly.

More often than not, lack of communication between patients and physicians or pharmacists is partially responsible for such noncompliance. For example, understanding what possible side effects may ensue, and what to do if they occur would alleviate much anxiety patients might have about taking a certain drug. Yet, according to a 1986 Food and Drug Administration (FDA) study, 85% of patients neglect to ask their physicians or pharmacists

questions about their medicine.

While some of these persons may get their information from friends or reference material, many—particularly the elderly—rely solely on physician trust. Certainly, trust between physician and patient remains essential, but asking questions about a particular regimen does not mean the patient doubts the doctor's judgment. In fact, questioning the physician enables him or her to address each patient's individual needs more effectively. That's not to say the physician should be lax in providing information on a particular drug without being asked. Teamwork enhances healthcare.

Keeping that in mind, before walking out of the doctor's office with prescription in hand, make sure you get answers to these questions:

- What are the brand and generic names of the drug and what is it supposed to do?
- How frequently is it taken? With or without meals? How long should the treatment last?
- What side effects are associated with the drug?

Knowing both the brand and generic names of the drug proves important, especially for those persons under the care of more than one physician. In such a case, the same generic drug could inadvertently be prescribed more than once but under a different brand name. Chance of drug overdose could be increased in this instance. Have all prescriptions filled at the same pharmacy. That way permanent drug records should thwart any potential drug duplication. Similarly, if you know what the medicine is supposed to do, but you still don't feel better, check with your doctor. Perhaps a drug or dosage change is necessary.

Time is of the essence

Even though most prescription labels indicate how frequently a drug should be taken, time intervals may not always be self-evident. For example, if directions say, "Take four times daily," does that mean you should set your alarm to take it during the night? Or, can time intervals be adjusted so that three doses are taken during the day, with the final one taken just before bedtime?

Food complicates the picture ...

Whether or not you should take medication on an empty or full stomach depends, again, on what kind of medicine is prescribed. Generally, food and libations interfere with the drug's ability to be absorbed into the bloodstream. Fruit and vegetable juice increases stomach acidity. This, in turn, can cause some drugs to dissolve quickly in the stomach instead of in the intestines where it can be dispersed more readily into the bloodstream.

Alcohol and antihistamines consumed together play havoc with the central nervous system. Alone, antihistamines, tranquilizers, and other drugs that slow down the central nervous system, frequently yield a sedative effect. Mixed with alcohol, they could prove dangerous, especially when operating machinery, driving, or performing other tasks that require motor skill coordination. Drinking plenty of water remains your best bet when it comes to taking pills or capsules.

For patients taking anticoagulants—drugs designed to prevent blood clotting—foods rich in vitamin K should be avoided. Naturally found in broccoli, liver, spinach, cabbage, egg yolks, cauliflower, and asparagus, vitamin K aids in blood clotting. Although this is important for preventing blood loss when injuries occur, additional vitamin K interferes with anticoagulants.

Dairy products are another food group that could interfere with medications, particularly the absorption of the antibiotic tetracycline. Reduced absorption hampers drug effectiveness. Red meats, green vegetables, and magnesium and aluminum found in antacids elicit the same problem.

Perhaps one of the most potentially dangerous interactions can occur with monamine oxidase (MAO) inhibitors—sometimes prescribed to treat depression—and tyramine. The latter is found in aged and fermented foods such as cheeses, yogurt, sour cream, some sausages, soy sauce, and wine. Caffeine-laden foods and beverages should also be avoided when taking MAO prescriptions. Mixing MAO inhibitors with these foods and drinks can cause high blood pressure, headaches, dizziness, brain hemorrhage and, rarely, death in some persons.

... while smoking clouds the issue

With all the chemicals found in cigarette smoke, it's not surprising that smoking doesn't mix well with drugs. Generally, smokers need to take larger than normal doses more frequently for the drug to work properly. That's because certain drugs, such as theophylline, which is often prescribed for asthma,

metabolize much quicker in a smoker's bloodstream than in a nonsmoker. Likewise, women taking birth control pills who smoke are at an increased risk of heart attack and stroke.

Other side effects

Although food, drink, and smoking influence how a drug works, most medicines have some side effects even when ingested alone. Certainly not every individual taking a particular drug will experience them. Likewise, not all side effects are serious enough to warrant medical attention.

Keeping that in mind, the chart below is intended to serve as a general guide. It lists a few commonly prescribed drugs, describes what conditions they're used for, and notes possible side effects associated with each. Most of these reactions don't require medical attention. However, remember that each person's response to a certain drug varies. Therefore, if anything alarming occurs that may not be mentioned here, don't hesitate to phone your physician or pharmacist.

Special concerns for the elderly

While nearly everyone can be susceptible to side effects occasionally, older people are particularly prone to such adverse reactions. According to the National Council on Patient Information and Education, seniors receive nearly 25% of all the 1.6 billion prescriptions written annually. Because many may have at least one chronic condition such as high blood pressure or arthritis that requires long-term treatment, this figure comes as no real surprise. Neither does the fact that 40% of patients who experience side effects are over age 60.

Certainly, those patients who follow more than one drug regimen simultaneously for different health problems are more prone to side effects. Physiological changes that accompany the aging process compound the problem. Overall body and individual organ weight decreases with age. Likewise, the proportion of body water, fat, and lean mass declines, too. Antibiotics, for example, stay in the body for a longer time. Because these drugs have a smaller "territory" to cover, their strength or concentration remains consistent, rather than peaking and falling as happens in younger persons. Toxicity becomes a real possibility. A periodic physician review of all medications can help prevent any drug-induced complications.

Don't dismiss OTCs

When it's time for that drug review, don't forget to

Commonly prescribed drugs and their side effects*

Drug	Purpose	Common side effects
Penicillin	For bacterial infections; NOT intended for virus infections (cold,flu)	Mild diarrhea; sore mouth, tongue; upset stomach; discolored tongue
Narcotic analgesics; acetaminophen	To relieve pain	Dizziness, lightheadedness; nausea or vomiting
Topical nitroglycerin	Improves blood, oxygen supply to heart; reduces workload on the heart; prevents angina (chest pains)	Dizziness; severe headache; rapid heartbeat; skin irritation (can be avoided by applying patch or ointment in different areas each time)
Tetracyclines	Treats infections; controls acne	Cramps, burning sensation in stomach; diarrhea; increased sensitivity to light; itching of rectal or genital areas
Oral thiazide diuretics	Controls hypertension (high blood pressure) by reducing water content of body	Diarrhea; dizziness, lightheadedness when standing up; decreased sexual ability; (dry mouth, irregular heart-beat, increased thirst, muscle cramps indicate too much potassium loss)
Oral antidiabetics	Reduces the amount of glucose (sugar) present in the blood; NOT intended for diabetics requiring insulin	Diarrhea; dizziness; heartburn; decreased appetite; increased sensitivity to sunlight on skin; nausea, vomiting
Oral antihistamines, decongestants	For congestion due to colds and hay fever	Drowsiness; thickening of bronchial secretions; possible stomach irritation if taken on an empty stomach
Oral digitalis	Improves heart strength and efficiency	Loss of appetite; nausea or vomiting; diarrhea; unusual tiredness; irregular pulse rate; blurred vision; drowsiness; confusion; headache, all indicate possible drug overdose
Topical antifungals	Treats fungal infections caused by ringworm, for example	Stinging
Injectable insulin	Controls diabetes by helping the body produce energy from carbohydrates, sugars found in food	Signs of low blood sugar include: chills, cold sweats; confusion; cold pale skin; excessive hunger; nervousness; rapid pulse; shakiness

*Adapted from information provided by the National Association of Retail Druggists.

mention aspirin and antacids, two popular home remedies, along with any other OTC preparations. Nearly every medicine cabinet stocks a bottle of aspirins, and because they're so common, it's tempting not to think of them as "real" medicine. Actually these innocent looking tablets do more than dull aches and pains. If taken daily, they can irritate the stomach lining and cause gastrointestinal bleeding, possibly causing iron deficiency, among other problems.

Some prescription drugs and antacids prove incompatible. Many antacids contain aluminum hydroxide. This active ingredient can affect absorption, or delay the release of certain drugs from the body through the urine. That means too little or too much medicine is present in the bloodstream. Either way, the drug can't work properly.

Final notes ...

"When in doubt, speak out," may not be an

appropriate 'sound bite' for the political parties 'spin doctors,' but this catch-phrase should help you get the facts straight about your drug regimen from your own medical physician:

- Tell your doctor what medications, prescription and OTC, you are taking. This also includes any vitamin supplements. Mention any allergies.
- Play it safe. Wash down any pills or capsules with plenty of water. If you're having trouble swallowing a pill, don't crush it. This could affect how well the drug works. Ask your doctor or pharmacist if it can be taken with applesauce or some other easily digestible food.
- Taking more than one drug? Find out what's the best schedule and write it down. Keep it next to your medicine bottles.
- Leave all drugs in their original containers, out of direct sunlight or away from extreme temperatures. These conditions can alter the drug's chemical characteristics and hinder its performance.
- If you're having trouble opening child resistant caps, request easy open containers from the pharmacist. But don't forget to put these drugs out of reach from little hands.
- Many pills look alike, so keep on the lights, and read the label (including the expiration date on OTC products) before popping pills into your mouth.
- Find out if the prescription can be refilled. Should any side effects ensue, call your doctor or pharmacist. Don't adjust your regimen without consulting a healthcare professional.
- Even if you feel better, continue to take the medicine as prescribed. Otherwise, the infection may return.
- Don't hesitate to talk with your doctor or pharmacist. Healthcare professionals are here to help you feel better. Answering your questions is part of that healing process.

(All material in the Patient Health Guide is reviewed by JAOA physician referees.)

When aspirin could prove fatal...

When given to a youngster recovering from the chickenpox, flu, or other viral infection, aspirin can trigger a potentially fatal disease—Reye's syndrome. Symptoms of Reye's syndrome include vomiting and drowsiness. The child may become unconscious. Convulsions can ensue. Brain swelling and kidney damage are possible. Instead of aspirin, give acetaminophen or ibuprofen. Better yet, before administering any analgesics to a feverish child who may be recuperating from the flu, check with your doctor.

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Upjohn Introduces
THE FIRST PRESCRIPTION MEDICATION
PROVED EFFECTIVE
FOR MALE PATTERN BALDNESS
OF THE VERTEX

Upjohn

NEW Rogaine[®] minoxidil 2% TOPICAL SOLUTION

New ROGAINE Topical Solution 2% is the *first* prescription medication proved effective for male pattern baldness of the vertex. There was no evidence of effectiveness on frontal balding. Evidence of growth was demonstrated by objective hair counts and physician and patient evaluations of 1,431 patients in 27 centers across the United States. This landmark study was divided into two phases: The first phase compared ROGAINE with placebo in a double-blind protocol for four months; the second phase, non-placebo-controlled, evaluated continuous b.i.d. application of ROGAINE for an additional eight months.

PATIENTS' EVALUATIONS OF HAIR GROWTH OVER 12 MONTHS

Patients evaluated their response to ROGAINE Topical Solution (minoxidil 2%) or placebo each month for four months. They judged response to be no growth or minimal, moderate, or dense growth.

Four-Month Phase

PATIENT EVALUATION OF HAIR GROWTH AT FOUR MONTHS

Rogaine (714)

Placebo (717)

Non-Placebo-Controlled Continuation Phase

In addition, after the placebo group was discontinued, continuous application of ROGAINE over an additional eight months was evaluated to determine growth.

PATIENT EVALUATION OF HAIR GROWTH AT 12 MONTHS

Rogaine (619)

FOR THE FIRST TIME...OBJECTIVE EVIDENCE OF HAIR GROWTH IN MALE PATTERN BALDNESS OF THE VERTEX

INVESTIGATORS' EVALUATIONS OF HAIR GROWTH OVER 12 MONTHS

Investigators evaluated patients on ROGAINE Topical Solution (minoxidil 2%) or placebo each month for four months. Response was judged to be no growth, new vellus (baby) hair, or minimal, moderate, or dense growth. (Photographs on following pages represent evaluations of minimal, moderate, and dense growth.) In addition, after the placebo group was discontinued, continuous application of ROGAINE over an additional eight months was evaluated to determine if nonvellus growth could be sustained.

Four-Month Phase

At the end of four months, 34% of patients treated with ROGAINE were evaluated by the investigators as showing nonvellus growth, while 20% showed nonvellus growth with placebo, a highly significant difference ($P < .0005$).

INVESTIGATOR EVALUATION OF HAIR GROWTH AT FOUR MONTHS

Rogaine (714)

Placebo (717)

Non-Placebo-Controlled Continuation Phase

After 12 months, dense growth was observed in 8% of the 619 patients treated with ROGAINE, moderate growth in 31%, and minimal growth in 37%. Approximately one fourth of patients showed only vellus hair growth or no growth.

INVESTIGATOR EVALUATION OF HAIR GROWTH AT 12 MONTHS

Rogaine (619)

Please see next to last page for brief summary of prescribing information.

TURN PAGE FOR PHOTOGRAPHIC EVALUATIONS OF HAIR GROWTH

EXAMPLES OF MINIMAL, MODERATE, AND DENSE GROWTH AS EVALUATED BY INVESTIGATORS

START OF STUDY

MINIMAL GROWTH

START OF STUDY

START OF STUDY

MODERATE GROWTH

DENSE GROWTH

NEW
Rogaine
TOPICAL SOLUTION
minoxidil 2%

TURN PAGE FOR HAIR COUNT EVALUATION

Please see next to last page for brief summary of prescribing information.

HAIR COUNTS CONFIRM HAIR GROWTH OVER 12 MONTHS

Monthly Hair Count Evaluation

Each month, nonvellus (normal) hairs were counted within a one-inch circle drawn on the vertex of the scalp of every patient, resulting in a mean nonvellus hair count.

Four-Month Phase

ROGAINE was shown to be significantly superior to placebo ($P < .0005$). Mean nonvellus hair count at the end of month 4 with ROGAINE was 192 versus 121 at baseline—an increase of 59%. Mean nonvellus hair count with placebo was 159 versus 120 at baseline—an increase of 33%.

Non-Placebo-Controlled Continuation Phase

Continuous application of ROGAINE for an additional eight months resulted in sustained growth of nonvellus hair. Mean hair count increased 58%, from 192 at the four-month baseline to 304, confirming growth seen in the earlier phase of the study.

Four-Month Phase— Significant Growth With ROGAINE

Non-Placebo-Controlled Continuation Phase— Sustained Growth With ROGAINE

PATIENT CRITERIA FAVORING GROWTH

One cannot predict the response to ROGAINE in any given patient, but certain criteria favoring growth were seen during the study.

AGE

Younger patients showed better growth with ROGAINE.

DURATION OF BALDNESS

Patients balding *less than ten years* showed better growth with ROGAINE.

DIAMETER OF BALDING AREA

Patients with a balding area *less than 10 cm* (about 4 inches) showed better growth with ROGAINE.

LONG-TERM TREATMENT NECESSARY FOR SUSTAINED GROWTH

Daily b.i.d. applications of ROGAINE for four months or longer are usually necessary before evidence of growth is seen in most patients. When patients were followed for one year, hair growth continued.

Newly grown hair returns to the untreated state three to four months after cessation of therapy with ROGAINE.

Please see next to last page for brief summary of prescribing information.

NEW
Rogaine
TOPICAL SOLUTION minoxidil 2%

TURN PAGE FOR INFORMATION ON SIDE EFFECTS

DATA FROM 5,891 PATIENTS SHOW A FAVORABLE SIDE-EFFECT PROFILE

INCIDENCE OF ADVERSE REACTIONS IS LOW

Dermatologic reactions were more common in the group treated with ROGAINE (5.27%) compared with placebo (3.44%). Otherwise, no individual reaction or reactions grouped by body systems appeared to be increased in the minoxidil-treated patients.

MEDICAL EVENT PERCENT OCCURRENCE BY BODY SYSTEM IN
THE PLACEBO CONTROL CLINICAL TRIALS INVOLVING MINOXIDIL
TOPICAL SOLUTION—ALL PATIENTS ENROLLED

	MINOXIDIL SOLN N = 3510 (4-6 MONTHS)	PLACEBO N = 2381 (4-6 MONTHS)
BODY SYSTEM	% OCC.	% OCC.
RESPIRATORY	5.95	6.51
DERMATOLOGICAL	5.27	3.44
CARDIOVASCULAR	1.28	1.18

FEW PATIENTS DISCONTINUED THERAPY

At four months, 1.3% of patients treated with ROGAINE discontinued therapy because of side effects, compared with 1% of patients on placebo. After 12 months, a total of 3.1% of the patients treated with ROGAINE discontinued therapy because of side effects.

POTENTIAL ADVERSE EFFECTS

Extensive use of topical minoxidil has not revealed evidence that enough minoxidil is absorbed to have systemic effects. Greater absorption because of misuse or individual variability or unusual sensitivity could lead, at least theoretically, to a systemic effect, and patients need to be aware of this.

Experience with oral minoxidil when used for hypertension has shown the following major cardiovascular effects:

- salt and water retention, generalized and local edema
- pericardial effusion, pericarditis, tamponade
- tachycardia
- increased frequency of angina or new onset of angina

MINIMAL ABSORPTION RESULTS IN CONSISTENTLY LOW SERUM LEVELS OF MINOXIDIL

The failure to detect evidence of systemic effects during treatment reflects the poor absorption of topical minoxidil. In a study of patients with hypertension, mean minoxidil concentrations after 1 mL b.i.d. of 2% topical minoxidil (1.7 ng/mL) were 1/20 the concentrations seen after daily oral doses of 2.5 mg (32.8 ng/mL) or 5 mg (59.2 ng/mL).

Before starting a patient on ROGAINE, the physician should ascertain that the patient has a healthy, normal scalp. Local abrasion or dermatitis may increase absorption and hence increase the risk of side effects. Greater absorption because of misuse or individual variability or unusual sensitivity could lead, at least theoretically, to a systemic effect.

PATIENTS WITH CARDIOVASCULAR DISEASE

Patients with a history of underlying heart disease should be aware that adverse effects in them might be especially serious. Patients should be alerted to the possibility of tachycardia and fluid retention and should watch for, and be monitored for, increased heart rate and weight gain or other systemic effects. No drug interactions have been reported with ROGAINE but, theoretically, orthostatic hypotension may occur in patients taking guanethidine.

No Appreciable Pharmacologic Response in Untreated Hypertensives

A well-controlled multicenter study of patients with *untreated* hypertension was conducted to determine if ROGAINE had an effect on blood pressure or pulse rate or caused fluid accumulation. No appreciable pharmacologic response was seen after application of ROGAINE twice daily for four days.

Please see next to last page for brief summary of prescribing information.

NEW
Rogaine
TOPICAL SOLUTION minoxidil 2%

TURN PAGE FOR DOSAGE INFORMATION AND APPLICATION

THE FIRST AND ONLY STANDARDIZED FORMULATION FOR HAIR GROWTH

ROGAINE Topical Solution (minoxidil 2%) is a cosmetically elegant, consistent formulation. ROGAINE is attractively packaged with a choice of applicators designed to suit individual needs (see below). Each 60-mL bottle of ROGAINE provides enough medication for one month's therapy.

A STRICT REGIMEN: TWICE A DAY, EVERY DAY

One milliliter of ROGAINE should be applied to the total affected areas of the scalp twice daily. Hair and scalp should be dry before application.

CONTINUED USE NECESSARY

Patients must follow the regimen for ROGAINE faithfully and understand that twice-daily application for four months or longer may be required before hair growth can be expected. The studies also showed that further growth continued from month 5 through month 12. There was no evidence of effectiveness on frontal balding.

Continuous use is necessary to maintain growth. Newly grown hair returns to the untreated state three to four months after cessation of treatment.

Each prescription of ROGAINE comes with three complimentary, disposable applicator tips to suit individual needs: The regular spray attachment applies solution to large areas of the scalp; the extended spray attachment applies solution to small scalp areas or under hair; the rub-on applicator tip aids in spreading solution directly on the scalp.

R
Rogaine 2%
Disp. 60 ml

Sig: apply bid to
dry scalp.

CONTRAINDICATIONS

A history of hypersensitivity to minoxidil, propylene glycol or ethanol.

WARNINGS

1. Need for normal scalp

Before starting treatment, make sure that the patient has a normal, healthy scalp. Local abrasion or dermatitis may increase absorption and hence the risk of side effects.

2. Potential adverse effects

Although extensive use of topical minoxidil has not revealed evidence that enough minoxidil is absorbed to have systemic effects, greater absorption due to misuse, individual variability or unusual sensitivity could, at least theoretically, produce a systemic effect.

Experience with oral minoxidil has shown the following major cardiovascular effects (Review the package insert for LONITEN® Tablets for details):

- salt and water retention, generalized and local edema
- pericardial effusion, pericarditis, tamponade
- tachycardia

—increased incidence of angina or new onset of angina
Patients with underlying heart disease, including coronary artery disease and congestive heart failure, would be at particular risk of these potential effects. Additive effects could also emerge in patients being treated for hypertension.

Potential patients should have a history and physical, should be advised of potential risks and a risk benefit decision should be made. Heart patients should realize that adverse effects may be especially serious. Alert patients to the possibility of tachycardia and fluid retention, and monitor for increased heart rate, weight gain or other systemic effects.

PRECAUTIONS

General Precautions

Patients should be monitored one month after starting ROGAINE and at least every six months afterward. Discontinue ROGAINE if systemic effects occur. The alcohol base will burn and irritate the eye. If ROGAINE reaches sensitive surfaces (eg, eye, abraded skin and mucous membranes) bathe with copious cool water.

Avoid inhaling the spray.

Do not use in conjunction with other topical agents such as corticosteroids, retinoids and petrolatum or agents that enhance percutaneous absorption. ROGAINE is for topical use only. Each ml contains 20 mg minoxidil and accidental ingestion could cause adverse systemic effects.

Decreased integrity of the epidermal barrier caused by inflammation or disease of the skin, eg, excoriations, psoriasis or severe sunburn, may increase minoxidil absorption.

Patient Information

A patient information leaflet is included with each package and in the full product information.

Drug Interactions

No drug interactions are known. Theoretically, absorbed minoxidil may potentiate orthostatic hypotension in patients taking guanethidine.

Carcinogenesis, Mutagenesis and Impairment of Fertility

No carcinogenicity was found with topical application. There is a suggestion that oral administration may be associated with an increased incidence of malignant lymphomas in female mice and hepatic nodules in male mice. In rats, there was a dose dependent reduction in conception rate.

Pregnancy Category C. ROGAINE should not be used by pregnant women.

Labor and Delivery: The effects are not known.

Nursing Mothers: ROGAINE should not be administered.

Pediatric Use: Safety and effectiveness have not been established under age 18.

ADVERSE REACTIONS

ROGAINE has been used by 3510 patients in placebo controlled trials. Except for dermatologic events, which were more common in the minoxidil group, no individual reaction or body system grouping seemed to be increased in the minoxidil treated group.

Medical Event Percent Occurrence By Body System In The Placebo Control Clinical Trials Involving Minoxidil Topical Solution —All Patients Enrolled

BODY SYSTEM	Minoxidil Soln N = 3510 (4-6 months)		Placebo N = 2381 (4-6 months)	
	#	%	#	%
	PATS.	OCC.	PATS.	OCC.
RESPIRATORY (bronchitis, upper respiratory infection, sinusitis)	209	5.95	155	6.51
DERMATOLOGICAL (irritant dermatitis, allergic contact dermatitis)	185	5.27	82	3.44
GASTROINTESTINAL (diarrhea, nausea, vomiting)	120	3.42	117	4.91
NEUROLOGY (headache, dizziness, faintness, lightheadedness)	90	2.56	71	2.98
MUSCULOSKELETAL (fractures, back pain, tendinitis)	76	2.17	43	1.81
CARDIOVASCULAR (edema, chest pain, blood pressure increases/decreases, palpitations, pulse rate increases/decreases)	45	1.28	28	1.18
ALLERGY (non-specific allergic reactions, hives, allergic rhinitis, facial swelling, and sensitivity)	36	1.03	15	0.63
SPECIAL SENSES (conjunctivitis, ear infections, vertigo)	33	0.94	26	1.09
METABOLIC-NUTRITIONAL (edema, weight gain)	21	0.60	19	0.80
URINARY TRACT (urinary tract infections renal calculi urethritis)	16	0.46	15	0.63
GENITAL TRACT (prostatitis, epididymitis)	16	0.46	10	0.42
PSYCHIATRIC (anxiety, depression, fatigue)	10	0.28	21	0.88
HEMATOLOGY (lymphadenopathy, thrombocytopenia)	8	0.23	6	0.25
ENDOCRINE	3	0.09	4	0.17

Patients have been followed for up to 5 years and there has been no change in incidence or severity of reported reactions.

Additional events reported in postmarketing clinical experience include: eczema, hypertrichosis, local erythema, pruritus, dry skin/scalp flaking, sexual dysfunction, visual disturbances including decreased visual acuity, exacerbation of hair loss, alopecia.

DOSAGE AND ADMINISTRATION

Hair and scalp should be dry before application. 1 ml should be applied to the total affected areas twice daily. Total daily dose should not exceed 2 ml. If the fingertips are used to facilitate drug application, wash the hands afterwards.

HOW SUPPLIED

60 ml bottle with multiple applicators NDC 0009-3367-05

Caution: Federal law prohibits dispensing without a prescription.

NEW
Rogaine
TOPICAL SOLUTION
minoxidil 2%

NEW
Rogaine
TOPICAL SOLUTION minoxidil 2%

THE FIRST PRESCRIPTION MEDICATION
PROVED EFFECTIVE
FOR MALE PATTERN BALDNESS
OF THE VERTEX

Upjohn

The Upjohn Company
Kalamazoo, Michigan 49001, USA

J-6430

August 1988

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Effective anorectal therapy begins with ANUSOL®. Offering prompt relief of pain, burning, and itching, ANUSOL allows anorectal patients to continue an active life-style. The rapid anesthetic action of pramoxine hydrochloride—available in ointment form—is as potent as benzocaine, but well tolerated and less sensitizing. And both ointment and suppository forms offer astringent and protectant properties to soothe irritated anorectal tissue.

To help put an end to anorectal discomfort, start your patients on the leading therapeutic choice for anorectal relief...recommend ANUSOL.

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