# Letters to the Editor

The Journal welcomes Letters to the Editor; if found suitable, they will be published as space allows. Letters should be typed double-spaced, should not exceed 400 words, and are subject to abridgment and other editorial changes in accordance with journal style.

### Cimetidine Drug Interactions

To the Editor:

In the June 1983 issue of *The Journal of Family Practice*, in an article reviewing cimetidine drug interactions, Greene, Self, and Levinson<sup>1</sup> state that:

The interaction with diazepam and chlordiazepoxide results in clinically appreciable increased sedation, and there appears to be no interaction with oxazepam or lorazepam. On this basis it is recommended that when a benzo-diazepine is needed in combination with cimetidine, oxazepam or lorazepam should be considered as agents of first choice.

This is not completely accurate. A number of reports and comments have appeared in the literature regarding the interaction between benzodiazepines and cimetidine.<sup>2-16</sup> For the most part, these have been pharmacokinetic studies, with little or no attention paid to clinical effects. In fact, of the older studies, only Klotz and Reimann<sup>3,5</sup> and Patwardhan<sup>11</sup> mention clinical effects. Klotz and Reimann note that after a single intravenous dose of diazepam (Valium), "... five of six patients experienced pronounced sedation and slept for one to three hours when pretreated with cimetidine." Patwardhan et al, on the other hand, found that after a single intravenous dose of chlordiazepoxide (Librium) "... all subjects remained asymptomatic during the



course of the investigation."

It appears that an interaction between cimetidine and benzodiazepines does occur. However, the important fact is that *no significant clinical effects* have been demonstrated to date, a fact further demonstrated by the recently published study by Gough et al.<sup>15</sup>

Dr. David Greenblatt has conducted a study titled "Clinical Implication of a Cimetidine-Diazepam Interaction." The study has been completed, and although the statistics are not in final form, he has stated the following based on preliminary observation (personal communication, December 13, 1982):

Coadministration of cimetidine to patients receiving diazepam causes an increase in steady-state plasma concentrations of diazepam and desmethyl-diazepam, but this causes no detectable change in the therapeutic effects of diazepam; nor is there any unwanted drowsiness or excessive sedation. Our study shows that the diazepam-cimetidine pharmacokinetic interaction is not clinically important.

Good medical practice dictates that patients receiving prescription drugs (either singly or in combination), including the drugs in question, be closely monitored.

Finally, it is important to note that indications for the various benzodiazepines do vary, and choice, therefore, cannot be made based on a pharmacokinetic interaction alone. Only some are indicated in alcohol withdrawal, as adjunctive therapy in convulsive disorders, and only one as adjunctive therapy in muscle spasm.

> Maria L. Bergamo, MD, Assistant Director, and Thaddeus E. Sudol, RPh Product Services Manager Professional Services Roche Laboratories Nutley, New Jersey

#### References

1. Greene WL, Self TH, Levinson MJ: Cimetidine drug interactions. J Fam Pract 16:1087, 1983

2. Klotz U, Anttila VJ, Reimann I: Cimetidine/diazepam interaction, letter. Lancet 2:699, 1979

3. Klotz U, Reimann I: Delayed clearance of diazepam due to cimetidine. N Engl J Med 302:1012, 1980

4. Dasta J, MacKichan J, Lima J, Altman M: Diazepam-cimetidine interaction. A preliminary report. Drug Intell Clin Pharm 14:633, 1980

5. Klotz U, Reimann I: Influence of cimetidine on the pharmacokinetics of desmethyldiazepam and oxazepam. Eur J Clin Pharmacol 18:517, 1980

6. Desmond PV, Patwardhan RV, Schenker S: Cimetidine impairs elimination of chlordiazepoxide (Librium) in man. Ann Intern Med 93:266, 1980

7. Ruffalo RL, Thompson JF: Effect of cimetidine on the clearance of benzo-diazepines, letter. N Engl J Med 303:753, 1980

8. Klotz U, Reimann I: Effect of cimetidine on the clearance of benzodiazepines, letter. N Engl J Med 303: 754, 1980

9. Patwardhan RV, Yarborough GW, Desmond PV, et al: Cimetidine spares the glucuronidation of lorazepam and oxazepam. Gastroenterology 79:912, 1980

10. Patwardhan RV, Johnson R, Sinclair A, et al: Lack of tolerance and rapid recovery of cimetidine-inhibited chlor-diazepoxide (Librium) elimination in man. Gastroenterology 80:1344, 1981

11. Patwardhan RV, Johnson RF, Sinclair AP, et al: Lack of tolerance and rapid recovery of cimetidine-inhibited chlor-diazepoxide (Librium) elimination. Gastroenterology 81:547, 1981

12. Ruffalo RL, Thompson JF, Segal JL: Diazepam-cimetidine drug interaction: A clinically significant effect. South Med J 74:1075, 1981

13. Babb RR: Drug interactions with cimetidine. Postgrad Med 70:60, 1981

14. McGowan WAW, Dundee JW: The effect of intravenous cimetidine on the absorption of orally administered diazepam and lorazepam. Br J Clin Pharmacol 14:207, 1982

15. Gough PA, Curry SH, Araujo OE, et al: Influence of cimetidine on oral diazepam elimination with measurement of subsequent cognitive change. Br J Clin

Pharmacol 14:739, 1982

16. Divoll M, Greenblatt DJ, Abernethy DR. Shader RI: Cimetidine impairs clearance of antipyrine and desmethyldiazepam in the elderly. J Am Geriatr Soc 30:684, 1982

#### **Treatment of Giardiasis**

To the Editor:

We would like to make additional comments concerning the treatment of giardiasis in children, prompted by a communication, "Giardia Lamblia: A Clinical-Epidemiological Case Report," by Sim S. Galazka (J Fam Pract 15:1165, 1982). This article stated that quinacrine is the drug of choice for giardiasis in both adults and children, with metronidazole as a second-line agent. We would like to expand on the treatment options based on a review of recent literature.

While quinacrine has been chosen as the drug of choice by many experts, 1,2 with 90 to 95 percent cure rates, its use has been accompanied by many side effects including nausea, vomiting, diarrhea, bitter taste, and yellow skin discoloration, particularly in young children. 1,3 In adults it is generally well tolerated and most effective. The product is available as a tablet only.

Metronidazole is 85 to 90 percent effective in conventional doses. Its use is limited by frequent nausea, vomiting, and metallic taste. It is generally better tolerated than quinacrine in children, though its potential teratogenicity has not been resolved. Liquid suspensions for pediatric use are available only outside the United States.

Furazolidone is available in both tablet and suspension forms. It is reported to be 77 to 92 percent effective in young children,1,3 and it is better tolerated than quinacrine or metronidazole in this age group. Its usefulness for routine therapy in young children is limited by relatively frequent nausea and vomiting, local availability, and high cost.

Other effective treatments not currently available in the United States include tinidazole, ornidazole, and nimorazole.

Allan S. Craig, MD Allan Ellsworth, PharmD Department of Family Medicine, University of Washington, Seattle, Washington

#### References

- 1. Wolfe MS: The treatment of intestinal protozoan infections. Med Clin North Am 66:707, 1982
- 2. Drugs for parasitic infections. Med Letter Drug Ther 24:5, 1982
- 3. Craft JC, Murphy T, Nelson JD: Furazolidine and quinacrine-Comparative study of therapy for giardiasis in children. Am J Dis Child 135:164, 1981

#### **Hospital Privileges for Family Physicians**

To the Editor:

In his article about hospital privileges for family physicians in the July 1983 issue (Pugno PA: Hospital privileges for family physicians: Rights, rationale, and resources. J Fam Pract 17:77, 1983), Dr. Pugno omitted an important restrictor of hospital privilegesstate law. On moving from Michigan to New York, I was distressed to discover that under New York state law, "physicians permitted to perform all types of obstetric procedures and deliveries shall be limited to qualified obstetricians. . . . physicians permitted to perform deliveries of a normal, uncompli-Continued on page 202

#### llosone® (erythromycin estolate)

Brief Summary. Consult the package literature for prescribing information.

#### WARNING

Hepatic dystunction with or without jaunoide has occurred, chiefly in adults, in association with erythromycin estolate administration. It may be accompanied by malaise, nausea, vomiting, abdominal colic, and fever. In some instances, severe abdominal pain may simulate an abdominal surgical

emergency.

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When oral medication is preferred for treating the abovementioned conditions, penicillin G or V or erythromycin is the alternate drug of choice.

alternate drug of choice.

The importance of the patient's strict adherence to the prescribed

The importance of the patient's strict adherence to the prescribed dosage regimen must be stressed when or all medication is given. A therapeutic dose should be administered for at least ten days. Alpha-Hemolytic Streptococci (Viridans Group)—Although no controlled clinical efficacy trials have been conducted, oral erythromycin has been suggested by the American Heart Association and American Dental Association for use in a regimen for prophylaxis against bacterial endocarditis in patients hypersensitive to penicillin who have congenital and/or rheumatic or other acquired valvular heart disease when they undergo dental procedures and surgical procedures of the upper respiratory tract. Erythromycin is not suitable for such prophylaxis prior to genitourinary or gastrointestinal tracts virgoery. nal tract surgery.

nat tract surgery.

Note: When selecting antibiotics for the prevention of bacterial endocarditis, the physician or dentist should read the full joint statement of the American Heart Association and the American

Staphylococcus aureus—Acute infections of skin and soft tissue which are mild to moderately severe. Resistance may develop during treatment.

(Diplococcus) pneumoniae - Infections of the upper respiratorytract (e.g., otitis media, pharyngitis) and lower respiratory tract (e.g., pneumonia) of mild to moderate severity.

Mycoplasma pneumoniae (Eaton Agent, PPLO)—Respiratory tract infections due to this organism.

Haemophilus influenzae—May be used concomitantly with ade-

Haemophilus influenzae—May be used concomitantly with adequate doses of sulfonamides for upper respiratory tract infections of mild to moderate severity. Not all strains of this organism are susceptible at the erythromycin concentrations ordinarily achieved (see appropriate sulfonamide labeling for prescribing information). Treponema pallidum—As an alternate treatment for primary syphilis in penicillin-allergic patients. In primary syphilis, spinal-fluid examinations should be done before treatment and as part of tables up after therapy.

Corynebacterium diphtheriae—As an adjunct to antitoxin, to prevent establishment of carriers, and to eradicate the organism in minutissimum - In the treatment of erythrasma

C. minutssimum— In the treatment of refuritabilities.

Entamoeba histolytica—For intestinal amebiasis only. Extraenteric amebiasis requires treatment with other agents.

Listena monocytogenes—Infections due to this organism.

Legionnaires' Disease—Although no controlled clinical efficacy studies have been conducted, in vitro and limited preliminary. clinical data suggest that erythromycin may be effective in treating Legionnaires' disease.

Contraindication: Known hypersensitivity to this antibiotic

Warnings: (See Warning box above.) The administration of erythro-Warnings: (See Warning box above.) The administration of erythromycin estolate has been associated with the infrequent occurrence of cholestatic hepatitis. Laboratory findings have been characterized by abnormal hepatic function test values, peripheral eosinophilia, and leukocytosis. Symptoms may include malaise, nausea vomiting, abdominal cramps, and fever Jaundice may or may not be present. In some instances, severe abdominal pain may simulate the pain of biliary colic, pancreatitis, perforated ulcer, or an acute abdominal surgical problem. In other instances, clinical symptoms and results of liver function tests have resembled findings in extrahepatic obstructive jaundice.

Initial symptoms have developed in some cases after a few daysof treatment but generally have followed one or two weeks of continuous therapy. Symptoms reappear promptly, usually within 48

treatment but generally have followed one of two weeks of confli-uous therapy Symptoms reappear promptly, usually within 48 hours after the drug is readministered to sensitive patients. The syndrome seems to result from a form of sensitization, occurs chiefly in adults, and has been reversible when medication is discontinued.

Usage in Pregnancy — Safety of this drug for use during pregnancy has not been established.

Precautions: Caution should be exercised in administering the

antibiotic to patients with impaired hepatic function. Recent studies of erythromycin reveal that its use in patients who are receiving high doses of theophylline may be associated with an increase in serum theophylline levels and potential theophylline toxicity. In such a case, the dose of theophylline should be reduced while the patient is receiving concomitant erythromycin therapy. Surgical procedures should be performed when indicated.

Adverse Reactions: The most frequent side effects are gastrointestinal (e.g., abdominal cramping and discomfort) and are dose related. Nausea, vomiting, and diarrhea occur infrequently with usual oral doses

During prolonged or repeated therapy, overgrowth of nonsusceptible bacteria or fungi is possible. If such infections arise, the drug

should be discontinued and appropriate therapy instituted.
Mild allergic reactions, such as urticaria and other skin rashes
have occurred. Serious allergic reactions, including anaphylaxis have been reported

1 American Heart Association Prevention of Bacterial Endocardilis Circulation, 56 139A, 1977 [093080]



Address medical inquiries to Dista Products Company
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References: 1. Kales J et al: Clin Pharmacol Ther 12:691-697, Jul-Aug 1971. 2. Kales A et al: Clin Pharmacol Ther 18:356-363, Sep 1975. 3. Kales A et al: Clin Pharmacol Ther 19: 576-583, May 1976. 4. Kales A et al: Clin Pharmacol Ther 32:781-788, Dec 1982. 5. Frost JD Jr, DeLucchi MR: J Am Geriatr Soc 27:541-546, Dec 1979. 6. Kales A, Kales JD: J Clin Pharmacol 3:140-150, Apr 1983. 7. Monti JM: Methods Find Exp Clin Pharmacol 3:303-326, May 1981. 8. Greenblatt DJ et al: Sleep 5 (Suppl 1):518-527, 1982. 9. Kales A et al: Pharmacology 26:121-137, 1983. 10. Greenblatt DJ, Allen MD, Shader RI: Clin Pharmacol Ther 21:355-361, Mar 1977. 11. Zimmerman AM: Curr Ther Res 13:18-22, Jan 1971. 12. Amrein R et al: Drugs Exp Clin Res 9(1):85-99, 1983.

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Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/ or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermitent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCI; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache. heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, e.g., excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. Adults: 30 mg usual dosage; 15 mg may suffice in some patients. Elderly or debilitated patients: 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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cated nature shall be required to hold consultations with a qualified obstetrician under the conditions listed below; and, such physicians shall transfer responsibility to a qualified obstetrician for those procedures which are not encompassed in their privileges' (NY Hosp Code, title 10, chap V, §405.8). There follows a list of 12 specific situations, including use of oxytocin and labors longer than 12 hours, to which these restrictions apply. This indeed is a case for the action of organized family practice.

David M. Newman, MD Brockport, New York

# **Bacterial Contamination of Sheathed Thermometers**

To the Editor:

A variety of infectious diseases may be transmitted to patients by cross-contamination from oral secretions and oral lesions. One mode of transmission may be facilitated by medical instruments or materials.

Mercury-in-glass thermometers are commonly used in medical practice and often remain contaminated or are recontaminated before they are reused.1 In 1972, a thermometer sheath was marketed to reduce cross-contamination. The current annual distribution of this sheath (according to Steridyne Corporation) is estimated at over 50 million units. Litsky2 reported that the thermometer sheath is effective in preventing cross-contamination when utilized for taking rectal temperatures. Later, Valenti and Takacs3 reported the thermometer sheath is frequently perforated when used for taking oral temperatures. However, in this latter study the oral placement time was not standardized, the presence or absence of teeth was not reported, and contamination of the thermometer was not evaluated.

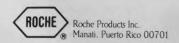
We conducted a study to evaluate mercury-in-glass sheathed thermometers for bacterial contamination after being used for taking 6-minute and 11-minute oral temperatures. One hundred mercuryin-glass thermometers were sterilized in buffered glutaraldehyde (Cider) for 24 hours. Using sterile technique, the thermometers were packaged individually in Steritemp Thermometer Sheaths. A control group of 25 thermometers were evaluated to determine whether they remained sterile after the packaging procedures. showed that all 25 thermometers from the control group remained sterile after the packaging procedures.

In a second group, the outer surfaces of 25 Steritemp Sheaths were evaluated for sterility and their permeability to oral bacteria from whole saliva in vitro. Results showed that the outer surfaces of all 25 sheaths were sterile and that each sheath was impermeable to oral bacteria when tested in vitro.

A third group of 25 sheathed thermometers were evaluated for contamination after being used for 11-minute oral temperatures from dentulous patients. Results showed that 80 percent of the thermometers (20/25) were contaminated.

A fourth group of 25 sheathed thermometers were evaluated for contamination after being used for taking 6-minute oral temperatures. Results showed that 80 percent of the thermometers (20/25) were contaminated

The findings from this study indicate that the thermometer sheath does not prevent bacterial contamination of the mercury-in-glass Continued on page 204



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thermometer when used for taking oral temperatures from dentulous patients. Patients tend not to comply with the request to avoid tooth contact with the sheathed-thermometer. Results showed that 80 percent of the sheaths had been perforated by the dentition and that all the respective thermometers were contaminated. Therefore, if the thermometer is not effectively sterilized after each use, the potential for cross-contamination may be as high as 80 percent.

In consideration of this potential for cross-contamination, we recommend that all sheathed thermometers be resterilized after each use using chlorine, iodophor, buffered glutaraldehyde preparations, or ethylene oxide. 1,2,4,5,6

Donald J. Soltero, DDS, MSD Earl E. Sommers, DDS, MSD Edmond L. Truelove, DDS, MSD Department of Oral Medicine University of Washington Seattle, Washington

#### References

1. Taylor JW, Smith VM, Zacher JL: For effective thermometer disinfection. Nurs Outlook 14:56, 1966

2. Litsky BY: A study of temperature taking systems. Superv Nurs 7:48, 1976

3. Valenti WM, Takacs KM: Infection control and clinical thermometry: Perforation of soft plastic thermometer sheaths during temperature measurement. Am J Infect Cont 9:1, 1981

4. Whitacre RJ, Robins SK, Williams BL, Crawford JJ: Dental Asepsis. Seattle,

Stoma Press, 1979

5. Lloyd RS, Kereluk K, Filiprowski WF, Vogel D: Sterilization of clinical thermometers with ethylene oxide. Hosp Mgmt 109:16, 1970

6. Landry E: Thermometer conservation technique. Hosp Prog 47:74, 1966

# Drug Interactions With Furosemide

To the Editor:

In the March 1983 issue of *The Journal of Family Practice*, we re-

ported a case of an interaction between furosemide and indomethacin resulting in decreased effectiveness of furosemide.1 In the discussion we pointed out that "diflunisal apparently causes no deleterious effect on the action of furosemide.' Recent work has been done, however, to dispute this fact. Favre et al2 studied the effects of diflunisal (in addition to indomethacin) on the action of furosemide, hydrochlorothiazide, triamterene, and spironolactone. Results of those studies indicate that diflunisal may indeed have an effect on furosemide similar to that of indomethacin, ie, an inhibitory effect on the action of furosemide. Further, it appears from this study that hydrochlorothiazide and triamterene are not significantly affected by indomethacin or diflunisal. This is in contrast to previous reports.3

It is not uncommon to see conflicting reports to the medical literature. This emphasizes the need to be especially cautious using drug combinations and to interpret the literature very carefully. The combination of any nonsteroidal anti-inflammatory drug and diuretic deserves careful monitoring and follow-up.

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#### References

1. Poe TE, Scott RB, Keith JF: Interaction of indomethacin with furosemide. J Fam Pract 16:610, 1983

2. Favre L, Glasson PH, Riondel A, et al: Interaction of diuretics and nonsteroidal anti-inflammatory drugs in man. Clin Sci 64:407, 1983

3. Kramer HJ, Dusing R, Stinnesbeck B, et al: Interaction of conventional and antikaliuretic diuretics with the renal prostaglandin system. Clin Sci 59:67, 1980

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