

AMOXIL® (amoxicillin)

For complete prescribing information, consult Official Package Insert.

Indications: Amoxil® (amoxicillin) is similar to ampicillin in its bactericidal action against susceptible strains of Gram-negative organisms—*H. influenzae*, *E. coli*, *P. mirabilis* and *N. gonorrhoeae*; and Gram-positive organisms—Streptococci (including *Streptococcus faecalis*), *D. pneumoniae* and non-penicillinase-producing staphylococci. Culture and sensitivity studies should be obtained. Indicated surgical procedures should be performed.

Contraindications: A history of a previous hypersensitivity reaction to any of the penicillins is a contraindication.

Warning: Anaphylaxis may occur, particularly after parenteral administration and especially in patients with an allergic diathesis. Check for a history of allergy to penicillins, cephalosporins or other allergens. If an allergic reaction occurs, discontinue amoxicillin and institute appropriate treatment. Serious anaphylactic reactions require immediate emergency treatment with epinephrine, oxygen, intravenous steroids and airway management.

Usage in Pregnancy: Safety for use in pregnancy is not established.

Precautions: Mycotic or bacterial superinfections may occur. Cases of gonorrhea with a suspected primary lesion of syphilis should have darkfield examinations before receiving treatment. In all other cases where concomitant syphilis is suspected, monthly serological tests should be performed for a minimum of four months. Assess renal, hepatic and hematopoietic functions intermittently during long-term therapy.

Adverse reactions: Untoward reactions include: glossitis, nausea, vomiting and diarrhea, skin rashes, urticaria, exfoliative dermatitis, erythema multiforme and anaphylaxis (usually with parenteral administration). Although anemia, thrombocytopenia, thrombocytopenic purpura, eosinophilia, leukopenia, and agranulocytosis have been noted, they are usually reversible and are believed to be hypersensitivity phenomena. Moderate elevations in SGOT have been noted.

Usual Dosage: Adults—250 to 500 mg orally q. 8h (depending on infection site and offending organisms). Children—20-40 mg/kg/day orally q. 8h (depending on infection site and offending organisms). Children over 20 kg should be given adult dose.

Gonorrhea, acute uncomplicated—3 Gms as a single oral dose (see PRECAUTIONS). Serious infections, such as meningitis or septicemia, should be treated with parenteral antibiotics.

Supplied:

Capsules—

- 250 mg in bottles of 100's and 500's, unit-dose cartons of 100.
- 500 mg in bottles of 50's and 500's, unit-dose cartons of 100.

for Oral Suspension—

- 125 mg/5 ml and 250 mg/5 ml in 80 ml, 100 ml and 150 ml bottles.

Pediatric Drops for Oral Suspension—

- 50 mg/ml in 15 ml bottles with calibrated dropper.

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laboratories

Bristol, Tennessee 37620

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.

The First Year in Undergraduate Medical Education

To the Editor:

The recent article "Insecurity in Medical Education: A Preventable Problem?" by John P. Geyman, MD (*J Fam Pract* 6:229, 1978), was very insightful on the problem of current *relevant* medical education. We would like to inform your readers of the first-year program at Southern Illinois University School of Medicine. The first year (Sequence I) of the three-year program is intimately structured around the ideals suggested by Dr. Geyman to "reorient medical education." Sequence I provides a prototype for relevant medical education, particularly as it pertains to the broader specialties in primary care.

Sequence I at Southern Illinois University is based in Carbondale, Illinois. Carbondale is the center of the rural southern portion of Illinois. The first year is not affiliated with a university medical center or a large teaching hospital, but rather with a small community hospital and clinic. This creates a strong attachment between community and curriculum. Such an attachment enables first year medical students to appreciate and take part in the varied aspects of primary care within a community.

Sequence I is novel in other im-

portant respects. The curriculum is designed around organ systems. Self-learning and competency-based tests are emphasized. The organ "block" is divided into relevant clinical "problem units." These problem units deal with common clinical situations facing physicians in practice. For instance, the neuroscience block contains problem units such as headache, changes in sensation, and bowel and bladder dysfunction. Each problem unit is similarly broken down into "modules." Modules cover the appropriate basic science disciplines relevant to the particular problem unit. This organ-system, clinical-application approach maximizes integration of the basic science curriculum with clinical practice. Further emphasis on clinical problem solving is shown in frequent tests, usually centering on a clinical case problem.

To better prepare first year students for primary care practice, Sequence I contains a strong medical humanities program. This program provides first year students with insight, both of a practical and a philosophical nature, into problems facing primary care physicians such as family physicians. Some of the humanities activities have included:

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1. A discussion of medical confidentiality with a practicing psychiatrist and a sexual behavior researcher.
2. A panel discussion of problem pregnancies consisting of women who had terminated pregnancies or followed through with them to term.
3. Small group discussions on the ethics of patient consent, psychosurgery, behavior modification, and social aspects of primary care.
4. A panel discussion on organ transplant and kidney dialysis composed of a kidney donor, his wife, and a dialysis patient on a transplant waiting list.

These activities expose the student to the varied humanitarian aspects of primary care.

To conclude, we hope we have expressed some of the outstanding changes Southern Illinois University has made in traditional first year medical education.

Joseph M. Pavese

Gregory A. Poland

Second year medical students

Southern Illinois University

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Hyperlipidemia in Children

To the Editor:

Though one may disagree with the ultimate usefulness of early identification and intervention in hyperlipidemia, the article "Cholesterol in Preteen Children of Parents with Premature Coronary Disease" (*Gross H, Caplan C: J Fam Pract 6:495, 1978*) is important to family medicine. A family physician could have easily done this study in his practice, and such research is vital for elucidating the unique potential contributions of office investigation. Also, studies

such as this demonstrate a unique role in patient care—concern for and contact with whole family units. Who else but family physicians could identify familial risk patterns, diagnose family members across age barriers, and treat comprehensively and longitudinally, childhood through adulthood? Special offerings of family physicians are continually recognized.

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Management of Adolescent Pregnancy

To the Editor:

I enjoyed the discussion of "Adolescent Pregnancy" in Family Practice Grand Rounds (*Miller PJ, Choquette J, Kirkpatrick PT, et al: J Fam Pract 5:859, 1977*). I appreciated the team approach to this multifaceted problem, but I think some additional comments are necessary.

Dr. Miller indicated that complications can be prevented by remembering three things (manual pelvimetry, roll-over test after 20th week, and observation of diastolic blood pressure for a rise of 20 mmHg). I think it would be best stated that you may anticipate possible complications by remembering those three things. I don't think we have a way at this time of preventing pregnancy-induced hypertension.

The roll-over test (ROT), usually done between the 28th and 32nd week, does separate nulliparous normotensive pregnant women into two groups: a group at low risk of developing hypertension and a group at high risk.¹ A more rapid (2 minute) ROT has now been reported and is apparently accurate.²

Observing for a 20 mmHg rise in

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EMPIRIN® COMPOUND with CODEINE

CONTRAINDICATIONS: Hypersensitivity to aspirin, phenacetin, caffeine or codeine.

WARNINGS: Drug dependence: Codeine can produce drug dependence of the morphine type and may be abused. Dependence and tolerance may develop upon repeated administration; prescribe and administer with the same caution appropriate to oral narcotics. Subject to the Federal Controlled Substances Act.

Use in ambulatory patients: Caution patients that these products may impair mental and/or physical abilities required for performance of potentially hazardous tasks such as driving a car or operating machinery.

Interaction with other CNS depressants: Patients receiving other narcotic analgesics, general anesthetics, phenothiazines, tranquilizers, sedative-hypnotics, or other CNS depressants (including alcohol) may exhibit additive CNS depression; when used together reduce dose of one or both.

Use in pregnancy: Safe use is not established. Should not be used in pregnant patients unless potential benefits outweigh possible hazards.

PRECAUTIONS: Allergic: Precautions should be taken in administering salicylates to patients with active peptic ulcers and those with known allergies; patients with nasal polyps are especially likely to be hypersensitive to the medication.

Head injury and increased intracranial pressure: Respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a pre-existing increase in intracranial pressure. Narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.

Acute abdominal conditions: These products or other narcotics may obscure the diagnosis or clinical course of acute abdominal conditions.

Special risk patients: Administer with caution to certain patients such as elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, or prostatic hypertrophy or urethral stricture.

ADVERSE REACTIONS: Most frequently include lightheadedness, dizziness, sedation, nausea, and vomiting; more prominent in ambulatory than in nonambulatory patients; some may be alleviated if patient lies down; others include: euphoria, dysphoria, constipation and pruritus.

Some patients taking salicylates develop nausea and vomiting. Hypersensitivity may be manifested by skin rash or anaphylactic reaction. With these exceptions, most side effects occur after repeated administration of large doses; include headache, vertigo, ringing in ears, mental confusion, drowsiness, sweating, thirst, nausea, and vomiting. Occasional patients experience gastric irritation and bleeding with aspirin.

Phenacetin side effects usually result from overdosage. Cyanosis, acute hemolytic anemia, skin lesions, and fever may appear with toxic doses. Continued abuse may lead to renal damage.

Caffeine side effects almost always result from overdosage; include insomnia, restlessness, excitement, tense muscles, and diuresis. Tachycardia and extrasystoles may be observed.

DRUG INTERACTIONS: CNS depressant effect may be additive with that of other CNS depressants. See Warnings.

For symptoms and treatment of overdosage and full prescribing information, see package insert.



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diastolic blood pressure may not be sensitive enough in detecting pregnancy-induced hypertension early. As early as the 17th week of gestation, a high-risk group may be identified by their blood pressures being closer to the normal non-pregnant blood pressures. Most pregnant women are relatively hypotensive early in pregnancy. A blood pressure above 110/75 mmHg sitting, or 100/65 mmHg in the left lateral position at 17 to 20 weeks of gestation is suspiciously high and would require close observation.³

I think the comments about management of the patient who develops hypertension imply that simple hospitalization and observation will result in a good outcome. The only effective therapeutic course for the treatment of pregnancy-induced hypertension is evacuation of the uterine contents. It may be better to err on the side of early delivery than to procrastinate and face potential maternal mortality or morbidity.

The study cited for conservative management of hypertension has a unit used exclusively for the management of high-risk pregnancies. (Such a unit is not available everywhere.) That study also excluded any patient with a diastolic blood pressure >110 mmHg and significant proteinuria. All patients are not to be simply monitored conservatively. Additionally, Hauth et al⁴ stated that ambulation ad lib in the hospital was very sedentary compared to usual outpatient activities.

It should be noted that of those patients managed conservatively by Hauth et al,⁴ 89 percent developed a recurrence of hypertension (42 percent before labor and 47 percent during labor). All patients were delivered immediately if there was:

1. rapid weight gain
2. a decrease in creatinine clearance
3. the appearance of significant proteinuria
4. clinical and/or sonographic evidence of fetal growth retardation, or
5. development of severe headache or scotomata.

Lee's⁵ use of the nonstress test would be worthwhile in evaluating the high-risk adolescent. Also, the acoustic stimulation nonstress test may offer a more rapid noninvasive method of assessing fetal well-being.⁶

Additionally, the discussion of the nutritional needs of the pregnant adolescent did not discuss the assessment of initial weight (ie, under ideal weight) or the need for specific weight gain (>20 pounds) during pregnancy.⁷

I believe the management of the pregnant adolescent is a little more complex than is implied in the article.

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References

1. Gant NF, Chand S, Whorley RJ, et al: A clinical test useful for predicting the development of acute hypertension in pregnancy. *Am J Obstet Gynecol* 120:1, 1974
2. Peck TM: A simple test for predicting pregnancy induced hypertension. *Obstet Gynecol* 50:615, 1977
3. Gallery EDM, Hunor JN, Ross M, et al: Predicting the development of pregnancy-associated hypertension: The place of standardized blood pressure measurement. *Lancet* 8025:1273, 1977
4. Hauth JC, Cunningham FG, Whalley PJ: Management of pregnancy induced hypertension in the nullipara. *Obstet Gynecol* 48:253, 1976
5. Lee CY: Fetal activity acceleration determination for the evaluation of fetal reserve. *Obstet Gynecol* 48:19, 1976
6. Read JA, Miller FC: Fetal heart rate acceleration in response to acoustic stimulation as a measure of fetal well-being. *Am J Obstet Gynecol* 129:512, 1977
7. Evrard JR, Gold EM: Adolescent pregnancy. *Perinatal Care* 1:8, 1977

LOMOTIL®

brand of diphenoxylate hydrochloride with atropine sulfate

IMPORTANT INFORMATION: This is a Schedule V substance by Federal law; diphenoxylate HCl is chemically related to meperidine. In case of overdose or individual hypersensitivity, reactions similar to those after meperidine or morphine overdose may occur; treatment is similar to that for meperidine or morphine intoxication (prolonged and careful monitoring). Respiratory depression may recur in spite of an initial response to Narcan® (naloxone HCl) or may be evidenced as late as 30 hours after ingestion. **LOMOTIL IS NOT AN INNOCUOUS DRUG AND DOSAGE RECOMMENDATIONS SHOULD BE STRICTLY ADHERED TO, ESPECIALLY IN CHILDREN. THIS MEDICATION SHOULD BE KEPT OUT OF REACH OF CHILDREN.** Indications: Lomotil is effective as adjunctive therapy in the management of diarrhea.

Contraindications: In children less than 2 years, due to the decreased safety margin in younger age groups, in patients who are jaundiced or hypersensitive to diphenoxylate HCl or atropine, and in diarrhea associated with pseudomembranous enterocolitis occurring during, or up to several weeks following, treatment with antibiotics such as clindamycin (Cleocin®) or lincomycin (Lincocin®).

Warnings: Use with special caution in young children, because of variable response, and with extreme caution in patients with cirrhosis and other advanced hepatic disease or abnormal liver function tests, because of possible hepatic coma. Diphenoxylate HCl may potentiate the action of barbiturates, tranquilizers and alcohol. In therapy, the concurrent use with monoamine oxidase inhibitors could precipitate hypertensive crisis. In severe dehydration or electrolyte imbalance, withhold Lomotil until corrective therapy has been initiated.

Usage in pregnancy: Weigh the potential benefits against possible risks before using during pregnancy, lactation or in women of childbearing age. Diphenoxylate HCl and atropine are secreted in the breast milk of nursing mothers.

Precautions: Addiction (dependency) to diphenoxylate HCl is theoretically possible at high dosage. Do not exceed recommended dosages. Administer with caution to patients receiving addicting drugs or known to be addiction prone or having a history of drug abuse. The subtherapeutic amount of atropine is added to discourage deliberate overdose; strictly observe contraindications, warnings and precautions for atropine; use with caution in children since signs of atropinism may occur even with the recommended dosage. Use with care in patients with acute ulcerative colitis and discontinue use if abdominal distention or other symptoms develop. **Adverse reactions:** Atropine effects include dryness of skin and mucous membranes, flushing, hyperthermia, tachycardia and urinary retention. Other side effects with Lomotil include nausea, sedation, vomiting, swelling of the gums, abdominal discomfort, respiratory depression, numbness of the extremities, headache, dizziness, depression, malaise, drowsiness, coma, lethargy, anorexia, restlessness, euphoria, pruritus, angioneurotic edema, giant urticaria, paralytic ileus, and toxic megacolon.

Dosage and administration: Lomotil is contraindicated in children less than 2 years old. Use only Lomotil liquid for children 2 to 12 years old. For ages 2 to 5 years, 4 ml. (2 mg.) t.i.d.; 5 to 8 years, 4 ml. (2 mg.) q.i.d.; 8 to 12 years, 4 ml. (2 mg.) 5 times daily; adults, two tablets (5 mg.) t.i.d. to two tablets (5 mg.) q.i.d. or two regular teaspoonsfuls (10 ml. 5 mg.) q.i.d. Maintenance dosage may be as low as one fourth of the initial dosage. Make downward dosage adjustment as soon as initial symptoms are controlled.

Overdosage: Keep the medication out of the reach of children since accidental overdosage may cause severe, even fatal, respiratory depression. Signs of overdosage include flushing, hyperthermia, tachycardia, lethargy or coma, hypotonic reflexes, myasthenia, pinpoint pupils and respiratory depression which may occur 12 to 30 hours after overdosage. Evacuate stomach by lavage, establish a patent airway and, when necessary, assist respiration mechanically. A narcotic antagonist may be used in severe respiratory depression. Observation should extend over at least 48 hours.

Dosage forms: Tablets, 2.5 mg. of diphenoxylate HCl with 0.025 mg. of atropine sulfate. Liquid, 2.5 mg. of diphenoxylate HCl and 0.025 mg. of atropine sulfate per 5 ml. A plastic dropper calibrated in increments of ½ ml. (total capacity, 2 ml.) accompanies each 2-oz. bottle of Lomotil liquid.

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