

Lotensin® benazepril hydrochloride

Other: Arthralgia, arthritis, asthenia, asthma, bronchitis, dyspnea, impotence, infection, myalgia, sinusitis, sweating, and urinary tract infection.

Clinical Laboratory Test Findings

Creatinine and Blood Urea Nitrogen: Of hypertensive patients with no apparent preexisting renal disease, about 2% have sustained increases in serum creatinine to at least 150% of their baseline values while receiving Lotensin, but most of these increases have disappeared despite continuing treatment. A much smaller fraction of these patients (less than 0.1%) developed simultaneous (usually transient) increases in blood urea nitrogen and serum creatinine. None of these increases required discontinuation of treatment.

Increases in these laboratory values are more likely to occur in patients with renal insufficiency or those pretreated with a diuretic and, based on experience with other ACE inhibitors, would be expected to be especially likely in patients with renal artery stenosis (see PRECAUTIONS, General).

Potassium: Since benazepril decreases aldosterone secretion, elevation of serum potassium can occur. Potassium supplements and potassium-sparing diuretics should be given with caution, and the patient's serum potassium should be monitored frequently (see PRECAUTIONS).

Hemoglobin: Decreases in hemoglobin (a low value and a decrease of 5 g/dL) were rare, occurring in only 1 of 2014 patients receiving Lotensin alone and in 1 of 1357 patients receiving Lotensin plus a diuretic. No U.S. patients discontinued treatment because of decreases in hemoglobin.

Other (causal relationships unknown): Clinically important changes in standard laboratory tests were rarely associated with Lotensin administration. Elevations of liver enzymes, serum bilirubin, uric acid, and blood glucose have been reported, as have scattered incidents of hyponatremia, electrocardiographic changes, leukopenia, eosinophilia, and proteinuria. In U.S. trials, less than 0.5% of patients discontinued treatment because of laboratory abnormalities.

OVERDOSAGE

Single oral doses of 3 g/kg benazepril were associated with significant lethality in mice. Rats however, tolerated single oral doses of up to 6 g/kg. Reduced activity was seen at 1 g/kg in mice and at 5 g/kg in rats. Human overdoses of benazepril have not been reported, but the most common manifestation of human benazepril overdosage is likely to be hypotension.

Laboratory determinations of serum levels of benazepril and its metabolites are not widely available, and such determinations have, in any event, no established role in the management of benazepril overdoses.

No data are available to suggest physiological maneuvers (e.g., maneuvers to change the pH of the urine) that might accelerate elimination of benazepril and its metabolites. Benazepril can be removed from the body by dialysis, but this intervention should rarely, if ever, be required.

Angiotensin II could presumably serve as a specific antagonist-antidote in the setting of benazepril overdose, but angiotensin II is essentially unavailable outside of scattered research facilities. Because the hypotensive effect of benazepril is achieved through vasodilation and effective hypovolemia, it is reasonable to treat benazepril overdose by infusion of normal saline solution.

Storage: Do not store above 86° F (30° C). Protect from moisture.

Dispense in tight container (USP).

Printed in U.S.A.

C92-18 (Rev.3/92)

C I B A

Dist. by:
CIBA Pharmaceutical Company
Division of CIBA-GEIGY Corporation
Summit, New Jersey 07901

*CIBA Pharmaceutical Company has established the Lotensin Lifetime Guarantee for patients who are started on Lotensin and enrolled in the program on or before 12/31/97. As part of the Lotensin Lifetime Guarantee, the Lotensin Lifetime Guarantee Price (based on Average Wholesale Price) has been established. This price is guaranteed for as long as the patient is on Lotensin therapy. Patients who enroll will be rebated the difference between the Lotensin Lifetime Guarantee Price and any higher price that can be documented as paid with an original receipt. Because retail prices may vary, a maximum rebate has been established. This rebate will be increased, as needed, to account for any price increases.

JAOA books

Reviews

Reviews of books for this section are welcomed from osteopathic physicians and from faculty members in osteopathic medical institutions. Interested individuals will be sent information on format on request. A certain number of reviews are invited for books supplied to JAOA by publishers; persons wishing to be a part of this program should write to the editors, giving background and areas of interest.

The Principles of Palpatory Diagnosis and Manipulative Techniques: Yearbook of the American Academy of Osteopathy, 1992

Edited by Myron C. Beal, DO. Pp 219, American Academy of Osteopathy, 1127 Mt Vernon Rd, PO Box 750, Newark, OH 43058-0750, 1992, \$18 (Academy members), \$20 (non-members), plus \$3 shipping and handling.

Almost every year since it was founded, the American Academy of Osteopathy has published a collection of articles. Typically, the *Yearbook* contains lectures given at the Academy's annual meeting; reports of presentations at regional Academy meetings; or reprints from the *JAOA*. The first *Yearbook*, published in 1939, included papers presented at the Manipulative Therapeutics Section of the American Osteopathic Association meeting held in July 1938. These early papers clearly

supported the Academy's founding principle—osteopathic medical education.

In recent years, the format has been changed to a monograph-like publication, grouping the writings of such persons as Angus G. Cathie, DO; Irvin M. Korr, PhD; and Wilbur Cole, DO. This format also featured a series of articles and reprints dealing with subjects of special interest to the osteopathic medical profession, such as postural balance and imbalance.

These Academy publications have proved invaluable to osteopathic principles teaching personnel, osteopathic medical students, and osteopathic medical colleges.

The newest *Yearbook* recently arrived on my desk. Editor Myron C. Beal, DO, FAAO, has served up another succulent plate of osteopathic medical educational goodies. It takes but a superficial review of the Table of Contents to see that this volume will enjoy a prominent place on many DOs' bookshelves alongside the medical dictionary, anatomy book, and CPT codebook. Famous osteopathic medical writers are well-represented here. Readers will recognize names such as Louisa Burns, J. S. Den-slow, W. F. Strachan, Charles Bowles, as well as Myron C. Beal.

According to the editor, this yearbook intends to inform the reader about the process and content issues surrounding the "...training of manipulative skills. It is designed to be a resource for students, teachers and physicians in practice."

Dr Beal includes articles docu-

menting philosophic concepts, teaching methods, and research results. Divided into 11 sections, commencing with the Glossary of Osteopathic Terminology, the *Yearbook* includes sections on psychomotor skills training, diagnosis, palpation, motion testing, manipulative technique, research, and two resource lists. The order in which the papers are presented adds a necessary clarity to this extensive collection; it makes for a delightful, comprehensible order of what could have been little more than a discordant "osteopathic smorgasbord."

Two bonus sections—Validation of Manipulation and Resources—are featured at the end of the *Yearbook*. The first of these sections lists articles from the world medical literature. These articles report research efforts concerning the efficacy of manipulation. They are just the sources we have all searched for to settle those arguments requiring documentation of the efficacy of manipulative treatment. Readers may have to modify their thinking after looking up some of these references.

The invaluable Resources section lists osteopathic medical texts, other works on manual medicine, journals, videotapes, and significant articles. The latter is subdivided into sections on palpation, reflexes, mechanics, and the like.

In all, this feast of osteopathic medical information is a must for every DO whether his or her occupational focus is the patient or the student.

DAVID A. PATRIQUIN, DO,
FAAO

Dept of Family Medicine
Professor, Section Head,
Osteopathic Principles
and Practice
Ohio University College of
Osteopathic Medicine
Athens, Ohio

Manter & Gatz's Essentials of Clinical Neuroanatomy & Neurophysiology

Edited by Sid Gilman and Sarah Winans, ed 8. Pp 328, F. A. Davis Co, 1915 Arch St, Philadelphia, PA 19103, 1992, \$21.95.

My review of *Manter & Gatz's Essentials of Clinical Neuroanatomy & Neurophysiology* felt like a visit with an old friend. My rumpled, well-worn copy of the fourth edition survives on my bookshelf from my medical school days. The current edition preserves the original clear, concise, and practical approach to neuroanatomy and neurophysiology, bringing it to life with examples of practical clinical applications.

For instance, chapter 19 succinctly describes the basal ganglia and related structures in ten pages. The concluding clinical discussion in that chapter emphasizes Parkinson's disease and Huntington's disease, showing the reader the clinical relevance of this otherwise dry, abstract topic.

All chapters have been updated; the new chapters, "Physiology of nerve cells," "Cerebral arteries," and "Approaches to patients with neurologic symptoms" enhance the original material. Black-and-white schematic drawings, some with red

highlights, are used effectively throughout this book.

Given the introductory nature of this text, it is understandable that no references are listed. However, a suggested reading list is provided for those readers wishing more detailed information.

The authors have produced an admirable update of a classic introductory work. This book proves extremely valuable for all medical students and for physicians-in-training who need to review basic clinical neuroscience.

DONALD A. BARONE, DO
Voorhees, NJ

Color Atlas of Mountain Medicine

Edited by J. Vallotton and F. Dubas. Pp 223, with illus, Mosby Year Book, 11830 Westline Industrial Dr, St Louis, MO 63146, 1991, \$85.

The first edition of this handsomely bound atlas provides concise, useful information for both the novice and experienced mountaineers or the physician who treats them. Printed on high-quality paper with numerous, informative color photographs, this atlas also features easy-to-understand diagrams and tables.

The first two short sections examine the historical aspects of medicine and today's mountain rescue techniques. Both of these sections offer interesting background and develop a frame of reference for the two major parts that follow: Part I describes climatic conditions and associated disorders; Part II covers trauma and sports medicine.

(continued on page 717)