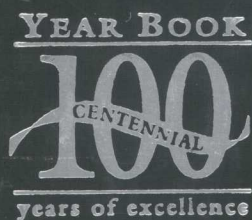


YEAR BOOK®

YEAR BOOK OF FAMILY PRACTICE® 2001



MARJORIE A. BOWMAN
WILLIAM W. DEXTER
VALERIE J. GILCHRIST
ELIZABETH H. MORRISON
RICHARD A. NEILL
JOSEPH E. SCHERGER

2001

The Year Book of FAMILY PRACTICE®

Editor-in-Chief

Marjorie A. Bowman, MD, MPA

Associate Editors

William W. Dexter, MD

Valerie J. Gilchrist, MD

Elizabeth H. Morrison, MD, MEd

Richard A. Neill, MD

Joseph E. Scherger, MD, MPH



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Joseph E. Scherger, MD, MPH

Professor and Chair, Department of Family Medicine, Associate Dean for Primary Care, University of California, Irvine

Journals Represented

Mosby and its editors survey approximately 500 journals for its abstract and commentary publications. From these journals, the editors select the articles to be abstracted. Journals represented in this YEAR BOOK are listed below.

Acta Obstetricia et Gynecologica Scandinavica
Acta Paediatrica
Age and Ageing
American Family Physician
American Journal of Cardiology
American Journal of Clinical Nutrition
American Journal of Epidemiology
American Journal of Gastroenterology
American Journal of Medicine
American Journal of Obstetrics and Gynecology
American Journal of Perinatology
American Journal of Psychiatry
American Journal of Public Health
American Journal of Roentgenology
Annals of Allergy, Asthma, & Immunology
Annals of Emergency Medicine
Annals of Internal Medicine
Annals of Rheumatic Diseases
Archives of Disease in Childhood
Archives of Family Medicine
Archives of Internal Medicine
Archives of Otolaryngology-Head and Neck Surgery
Archives of Pediatrics and Adolescent Medicine
Archives of Physical Medicine and Rehabilitation
Arthritis and Rheumatism
Australian and New Zealand Journal of Obstetrics and Gynaecology
British Journal of General Practice
British Journal of Obstetrics and Gynaecology
British Journal of Psychiatry
British Journal of Radiology
British Journal of Urology
British Medical Journal
Canadian Journal of Psychiatry
Chest
Circulation
Clinical Infectious Diseases
Clinical Journal of Pain
Clinical Pediatrics
Contraception
Critical Care Medicine
Developmental Medicine and Child Neurology
Diabetes Care
Diseases of the Colon and Rectum
European Urology
Fertility and Sterility
Foot & Ankle International
Headache

Human Reproduction
Hypertension
Journal of Allergy and Clinical Immunology
Journal of Bone and Joint Surgery (American Volume)
Journal of Bone and Mineral Research
Journal of Clinical Endocrinology and Metabolism
Journal of Clinical Epidemiology
Journal of Clinical Hypertension
Journal of Clinical Pathology
Journal of Consulting and Clinical Psychology
Journal of Family Practice
Journal of General Internal Medicine
Journal of Gerontology. Series A Biological Sciences and Medical Sciences
Journal of Human Hypertension
Journal of Laryngology and Otology
Journal of Manipulative and Physiological Therapeutics
Journal of Maternal-Fetal Medicine
Journal of Pediatrics
Journal of Reproductive Medicine
Journal of Rheumatology
Journal of Urology
Journal of Vascular Surgery
Journal of the American Academy of Dermatology
Journal of the American Board of Family Practice
Journal of the American College of Cardiology
Journal of the American Geriatrics Society
Journal of the American Medical Association
Lancet
Mayo Clinic Proceedings
Medical Care
Medicine and Science in Sports and Exercise
Neurosurgery
New England Journal of Medicine
Obstetrics and Gynecology
Occupational and Environmental Medicine
Ophthalmology
Pediatric Infectious Disease Journal
Pediatric Neurology
Pediatrics
Pharmacotherapy
Physician and Sportsmedicine
Southern Medical Journal
Spine
Stroke
Surgery
The Laryngoscope Journal
Thorax
Thyroid
Urology

STANDARD ABBREVIATIONS

The following terms are abbreviated in this edition: acquired immunodeficiency syndrome (AIDS), cardiopulmonary resuscitation (CPR), central nervous system (CNS), cerebrospinal fluid (CSF), computed tomography (CT), deoxyribonucleic acid (DNA), electrocardiography (ECG), health maintenance organization (HMO), human immunodeficiency virus (HIV), intensive care unit (ICU), intramuscular (IM), intravenous (IV), magnetic resonance (MR) imaging (MRI), ribonucleic acid (RNA), and ultrasound (US).

NOTE

The YEAR BOOK OF FAMILY PRACTICE is a literature survey service providing abstracts of articles published in the professional literature. Every effort is made to assure the accuracy of the information presented in these pages. Neither the editors nor the publisher of the YEAR BOOK OF FAMILY PRACTICE can be responsible for errors in the original materials. The editors' comments are their own opinions. Mention of specific products within this publication does not constitute endorsement.

To facilitate the use of the YEAR BOOK OF FAMILY PRACTICE as a reference tool, all illustrations and tables included in this publication are now identified as they appear in the original article. This change is meant to help the reader recognize that any illustration or table appearing in the YEAR BOOK OF FAMILY PRACTICE may be only one of many in the original article. For this reason, figure and table numbers will often appear to be out of sequence within the YEAR BOOK OF FAMILY PRACTICE.

Publisher's Preface

The publication of the 2001 YEAR BOOK series marks the 100th anniversary of the original Practical Medicine Series of Year Books. To commemorate this milestone, each 2001 Year Book includes an anniversary seal on the cover. The content and format of the Year Books remain unchanged from the beginning of the last century—each volume consists of abstracts of the best scholarly articles of the year, accompanied by expert critical commentaries.

The first Year Book appeared in 1900 when Gustavus P. Head, MD, produced the first *Year Book of the Nose, Throat and Ear*, a volume consisting of highlights from the previous year's best literature, enhanced by expert observations. Dr Head assembled a small group of distinguished physicians to serve as editors, and the first series of Year Books was published in 1901. The first volumes of the Year Book series—*General Medicine*, *General Surgery*, *The Eye*, *Gynecology*, *Obstetrics*, *Materia Medica and Therapeutics*, *Pediatrics*, *Physiology*, and *Skin and Venereal Diseases*—appeared at monthly intervals, with 10 volumes published in 1 year. The entire series was met with critical enthusiasm.

In 1904, Dr Head's brother, Cloyd, assumed responsibility for the management of the Year Books. In 1905, the volumes began to appear at regular intervals during the calendar year instead of on a monthly basis. By World War I, the Year Books had been established as an authority on medical and surgical progress.

The postwar period brought about a significant change in the practice of medicine: specialization. To accommodate the rise of specialization in medicine, the Year Books were now sold as individual volumes rather than only as a complete set. This change brought about a tremendous response and sales of the books increased. In 1922, the Year Books became even more specialized, as the books now had different editors for the different medical specialties covered in each volume. Later, in 1933, the title of the series changed from the Practical Medicine Series of Year Books to the Practical Medicine Year Books to reflect these new designs.

The Year Books have grown significantly from the first 10-volume series in 1901 to a diversified series of 32 volumes in 2001. That the Year Book series is the only series of their kind to have survived is a testament to the vision and commitment of its founders. Some minor changes in format and design have occurred throughout the years, but the mission of the Year Book series—to provide a record of exceptional medical achievements distinguished by the reflections of many of the great names in medicine today—has remained constant.

Foreword

With the publication of the 2001 YEAR BOOK OF FAMILY PRACTICE, we welcome Marjorie Bowman, MD, MPA, as our Editor-in-Chief. We also welcome two associate editors, Valerie Gilchrist, MD, and Richard Neill, MD.

Dr Bowman served as an associate editor for 10 years before taking over the reins last year from Alfred Berg, MD, MPH. She has made a smooth transition and, along with her Editorial Board, has compiled a well-rounded and organized book from thousands of journal articles under consideration. Their efforts have maintained the high standards that readers of the YEAR BOOK have come to recognize over the years.

Drs Gilchrist and Neill completed their first year as veteran editors; they reviewed hundreds of articles, selected those that deserved mention, and provided their commentary. Their efforts match those of the entire Editorial Board.

We also thank Robert Davidson, MD, MPH, for his years of service to the YEAR BOOK OF FAMILY PRACTICE. The 2000 edition was his ninth and final edition. Dr Davidson provided readers of the YEAR BOOK with insightful commentary, and we wish him the best in all his future endeavors.

Introduction

Putting together a YEAR BOOK is quite exciting. This is my first year as Editor-in-Chief, and I am quite impressed by the amount of medical literature touching on a very large variety of problems important in family practice that has been collected in one place. It is also very reassuring the large number of these studies that are high quality—such as double-blinded, randomized, controlled trials—and that present evidence on patient outcomes that are directly pertinent to what we should do. While I read a lot of medical literature, there were still articles gathered through the extensive YEAR BOOK process that I have missed! My associate editors have also added valuable insights, thoughtful reviews, and other literature to consider in making decisions on what these new reports mean to the practice of family medicine. At the beginning of each section, I have highlighted a few of the articles to stimulate thinking. May your reading add benefit to your patients as much as the process has for mine.

Marjorie A. Bowman, MD, MPA

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1 Cardiovascular Disease

Hypertension

INTRODUCTION

Hypertension is common and inadequately controlled. Do you know which hypertension treatment (bet you will be surprised) is associated statistically with the development of diabetes? Sleep apnea may be a risk factor for hypertension, or does the sleep apnea cause the hypertension? We need to pay attention to the blood pressure of our patients who are taking nonsteroidal anti-inflammatory agents. A minority of patients may be able to be taken off blood pressure medications after successful treatment. The selected arm makes a difference in ambulatory blood pressure monitoring.

Marjorie A. Bowman, MD, MPA

Detection and Control of High Blood Pressure in the Community: Do We Need a Wake-up Call?

Meissner I, Whisnant JP, Sheps SG, et al (Mayo Clinic and Mayo Found, Rochester, Minn)

Hypertension 34:466-471, 1999

1-1

Background.—Hypertension is an important risk factor for both coronary heart disease and stroke. The stroke Prevention: Assessment of Risk in a Community study was initiated in 1993 in Olmstead County, Minn, to prospectively elucidate risk factors for stroke and cardiovascular disease. Awareness, treatment, and control rates for hypertension in this population were examined.

Study Design.—The study group consisted of a random sample of 636 Olmstead County community residents at least 45 years of age. A home interview was conducted to determine health status; medical history; and smoking, alcohol, and caffeine consumption. Two blood pressure (BP) measurements were recorded before the interview and 4 afterward. BP was also measured at a clinic visit. BP assessment was used to estimate awareness, treatment, and control rates for hypertension in this community.

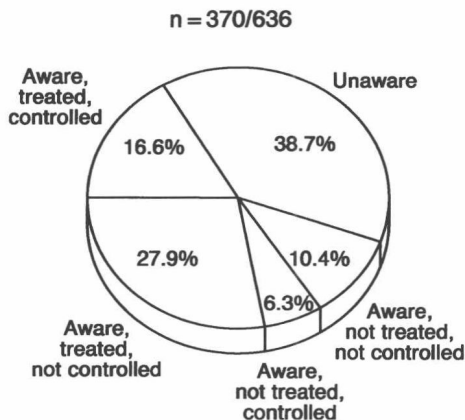


FIGURE 3.—Awareness of hypertension and its treatment and control (expressed as percentage), according to criteria of the Fifth Report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure ($\leq 140/90$ mm Hg). Hypertension was a blood pressure $\geq 190/90$ mm Hg or a subject-reported history of hypertension; treatment was a subject-reported use of antihypertensive medication; control was a blood pressure of less than $140/90$ mm Hg in subjects with a reported history of hypertension; and awareness was a subject-reported history of hypertension. (Courtesy of Meissner I, Whisnant JP, Sheps SG, et al: Detection and control of high blood pressure in the community: Do we need a wake-up call? *Hypertension* 34:466-471, 1999.)

Findings.—The average BP for the study group population was 138/80 mm Hg for men and 137/76 mm Hg for women. The overall prevalence of hypertension was 53%. The percentage of those with treated and controlled hypertension was 16.6% (Fig 3), whereas 38% were unaware of their hypertension.

Conclusion.—The rates of awareness and control of hypertension in this community were suboptimal. Efforts to heighten awareness of the risks of increased blood pressure and to increase detection and control are needed at the community level.

► From a population perspective, we are not doing an adequate job of controlling hypertension. What amazes me from this study is that it was done in Olmstead County, Minn, the location of the Mayo Clinic. One might think that the people in this county would receive the best health care in the world. Even there, only a minority of the patients in the community were aware of their hypertension and had it controlled. Like lipid disorders, obesity, and smoking, hypertension is a major modifiable risk factor for heart disease and stroke and a top priority for screening and chronic disease management.

J. E. Scherger, MD, MPH

Hypertension and Antihypertensive Therapy as Risk Factors for Type 2 Diabetes Mellitus

Gress TW, for the Atherosclerosis Risk in Communities Study (Johns Hopkins Univ, Baltimore, Md; et al)

N Engl J Med 342:905-912, 2000

1-2

Objective.—Thiazide diuretics and β -blockers have been shown in some studies to increase the risk for development of type 2 diabetes, yet many studies have been small, of short duration, or not generalizable. Whether there is an independent relationship between the use of antihypertensive medications and the risk of development of type 2 diabetes was examined in a prospective cohort study.

Methods.—Health evaluations were conducted in 12,550 patients, aged 45 to 64 years, baseline and at 3 and 6 years later. Patients were stratified according to the presence or absence of hypertension. Multivariate analysis was performed to determine the relationship between the use of antihypertensive medications and the incidence of type 2 diabetes.

Results.—Hypertensive individuals ($n = 3804$) were fatter; had higher fasting serum glucose levels; were older; and were more likely to be black, have a lower educational level, and have co-morbid conditions compared with the 8746 individuals with normal results. During the follow-up, there were 1146 new cases of type 2 diabetes (16.6/1000), with 569 occurring in patients with hypertension and 577 occurring in normotensive patients (relative risk, 2.43). Hypertensive patients not taking antihypertensive medications had a much higher risk for type 2 diabetes than did those who did not have hypertension. After adjustment for confounders, individuals with hypertension taking thiazide diuretics, angiotensin-converting enzyme inhibitors, and calcium-channel blockers were not at an increased risk for development of type 2 diabetes. Hypertensive patients taking β -blockers had a 28% higher risk for type II diabetes.

Conclusion.—Although β -blockers appear to increase the risk of type 2 diabetes, thiazide diuretics and angiotensin-converting enzyme inhibitors do not.

► Given the frequent coexistence of hypertension and type 2 diabetes, it should not be surprising that these 2 conditions may be interrelated. This study received much publicity, and there is concern that β -blockers for hypertension may contribute to type 2 diabetes. The mechanism for this is unclear. I find it reassuring that thiazide diuretics, a less expensive and highly effective means of treating hypertension, do not seem to increase diabetes risk.

J. E. Scherger, MD, MPH

Obstructive Sleep Apnoea Syndrome as a Risk Factor for Hypertension: Population Study

Lavie P, Herer P, Hoffstein V (Israel Inst of Technology, Haifa; Univ of Toronto)
BMJ 320:479-482, 2000 1-3

Background.—There is a strong relationship between obstructive sleep apnea syndrome and hypertension. However, the large number of potentially confounding variables casts doubt on the causal nature of this relationship. A large group of patients with sleep disorder was studied to analyze the association between blood pressure, severity of apnea, and potential confounding factors.

Methods.—The prospective study included 2677 adult patients evaluated for suspected sleep apnea over a 10-year period. All underwent nocturnal polysomnography, from which the apnea-hypopnea index was calculated. Other variables assessed included anthropometric measures, smoking, and blood pressure.

Results.—Systolic and diastolic blood pressures increased along with the apnea-hypopnea index. However, sex, age, obesity, and smoking also increased with the apnea-hypopnea index. In a multiple regression analysis of patients not receiving antihypertensive medications, apnea was a significant predictor of systolic and diastolic blood pressure. This was so after adjustment for age, body mass index, and sex. Each 1-event increase in apneic events per hour carried a 1% increase in the odds of hypertension. For each 10% reduction in nocturnal oxygen saturation, the odds of hypertension increased by 13% (Fig 1).

Conclusion.—The strong relationship between sleep apnea syndrome and hypertension is confirmed. This relationship is independent of other risk factors. The possibility of sleep apnea should be considered in the workup of patients with essential hypertension.

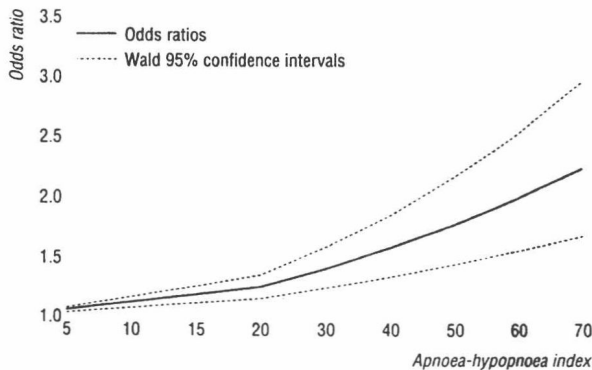


FIGURE 1.—Odds ratios and Wald 95% CIs for hypertension associated with apnea-hypopnea index level of 5, 15, 30, 40, 50, 60, and 70 predicted by best fitting multiple logistic model: $T = e^{(.012 \text{apnea-hypopnea index} + .081 \text{age} + .161 \text{male} + .067 \text{body mass index})}$ ($n=2452$). (Reprinted with permission from the BMJ Publishing Group, from Lavie P, Herer P, Hoffstein V: Obstructive sleep apnoea syndrome as a risk factor for hypertension: Population study. *BMJ* 320:479-482, 2000.)