

The YEAR BOOK of

Obstetrics and Gynecology®

1984

Editors

ROY M. PITKIN, M.D.

FRANK J. ZLATNIK, M.D.



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*Professor and Head, Department of Obstetrics and Gynecology,
University of Iowa College of Medicine*

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CHICAGO

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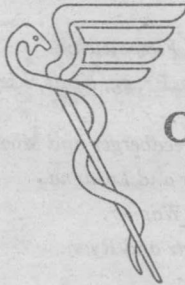
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Introduction

Readers occasionally ask about how the YEAR BOOK OF OBSTETRICS AND GYNECOLOGY reaches its final printed form. A brief outline of the process might therefore be of interest.

The publisher subscribes to nearly all biomedical journals published in English as well as to a number in German, French, Spanish, and Italian. Each article in each journal is screened by YEAR BOOK employees and marked to indicate the YEAR BOOK for which it is appropriate. Often, an article may be marked for consideration by editors of four or more of the 25 different YEAR BOOKS. In the case of our YEAR BOOK, all articles relating to obstetrics and gynecology in the broadest possible sense are included.

Each month, a rather large box containing intact issues of specialty journals or individual articles torn from general journals arrives on our doorstep. Our task is to review these and select those we wish to include. One of us reads each paper selected and summarizes it for the other; the primary reviewer also prepares a rough draft of the editorial comment. Our major focus in selecting articles is that of relevance to clinical practice. We try to pick those that report new information or resolve controversial or contradictory data. Most of our selections represent what we believe to be the best papers published, although in some cases a study that we regard as flawed is included in order to point out its inadequacies. Although many articles are selected from United States specialty journals, each year we include many papers from general and foreign journals that ordinarily are not seen by the practitioner. Our goal is to provide the obstetrician-gynecologist with an extensive body of current information.

Articles selected are sent to the publisher for abstracting by professional abstractors. The original article and the abstract are then returned to us for verification, and at this time we put our editorial comments in final form. Toward the end of the year (October in the case of the YEAR BOOK OF OBSTETRICS AND GYNECOLOGY), we organize the articles in proper category and sequence and make one final check of the manuscript. It might seem that this would be a propitious time for a celebration but by the time the manuscript has gone to the publisher, we've already been working on the next year's book for two months!

The special articles in this year's edition concern two important topics in contemporary obstetrics and gynecology. Jennifer R. Niebyl, of Johns Hopkins University, has prepared an excellent summary of drug effects in pregnancy, with particular emphasis on clinical teratology. This general subject probably accounts for more patient questions, to say nothing of its medicolegal implications, than any other, and Doctor Niebyl is one of the nation's authorities in the area. The

second article, an update on the pathogenesis, diagnosis, and treatment of endometriosis, is authored by Robert W. Kistner, Robert L. Barbieri, and Stephen Evans, of Harvard University. Doctor Kistner's name has certainly been the one most associated with this particular disease for more than a quarter century, and he has played a major role in most of the advances occurring over that period of time.

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Journals Represented

Acta Endocrinologica
Acta Obstetrica et Gynecologica Scandinavica
American Journal of Cardiology
American Journal of Clinical Nutrition
American Journal of Diseases of Children
American Journal of Epidemiology
American Journal of Medicine
American Journal of Obstetrics and Gynecology
American Journal of Surgery
American Surgeon
Anaesthesia and Intensive Care
Anesthesia and Analgesia
Annales Chirurgiae et Gynaecologiae
Annals of Internal Medicine
Annals of Surgery
Archives of Diseases of Childhood
Archives of Internal Medicine
Australian and New Zealand Journal of Obstetrics and Gynaecology
British Journal of Clinical Pharmacology
British Journal of Obstetrics and Gynaecology
British Journal of Surgery
British Journal of Urology
British Medical Journal
Canadian Medical Association Journal
Cancer
Clinical Endocrinology
Clinical Pediatrics
Contraception
Developmental Medicine and Child Neurology
Diabetologia
Fertility and Sterility
Gynecologic and Obstetric Investigation
Gynecologic Oncology
International Journal of Fertility
International Journal of Gynaecology and Obstetrics
Journal of Adolescent Health Care
Journal of the American Medical Association
Journal of the Canadian Association of Radiologists
Journal of Clinical Endocrinology and Metabolism
Journal of Family Practice
Journal of Nervous and Mental Disease
Journal of Occupational Medicine
Journal of Pediatric Surgery
Journal of Pediatrics
Journal of Urology
Lancet
Life Sciences

Neurology
 Neuropediatrics
 New England Journal of Medicine
 Obstetrics and Gynecology
 Pediatric Research
 Pediatrics
 Prostaglandins
 Psychological Medicine
 Psychophysiology
 Quarterly Journal of Medicine
 Scandinavian Journal of Clinical and Laboratory Investigation
 Science
 South African Medical Journal
 Southern Medical Journal
 Surgery
 Therapeutic Drug Monitoring
 Urologia Internationalis

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 American Journal of Diseases of Children
 American Journal of Epidemiology
 American Journal of Medicine
 American Journal of Obstetrics and Gynecology
 American Journal of Surgery
 American Surgeon
 Anesthesia and Intensive Care
 Anesthesia and Analgesia
 Annales Chirurgiae et Gynaecologiae
 Annals of Internal Medicine
 Annals of Surgery
 Archives of Diseases of Childhood
 Archives of Internal Medicine
 Australian and New Zealand Journal of Obstetrics and Gynaecology
 British Journal of Clinical Pharmacology
 British Journal of Obstetrics and Gynaecology
 British Journal of Surgery
 British Journal of Urology
 British Medical Journal
 Canadian Medical Association Journal
 Cancer
 Clinical Endocrinology
 Clinical Pediatrics
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 Developmental Medicine and Child Neurology
 Diabetologia
 Fertility and Sterility
 Gynecologic and Obstetric Investigation
 Gynecologic Oncology
 International Journal of Fertility
 International Journal of Gynecology and Obstetrics
 Journal of Adolescent Health Care
 Journal of the American Medical Association
 Journal of the Canadian Association of Radiologists
 Journal of Clinical Endocrinology and Metabolism
 Journal of Family Practice
 Journal of Nervous and Mental Disease
 Journal of Occupational Medicine
 Journal of Pediatric Surgery
 Journal of Pediatrics
 Journal of Urology
 Lancet
 Life Sciences

PART ONE
OBSTETRICS

PART ONE
OBSTETRICS



1. Maternal and Fetal Physiology

1-1 **Growth of the Birth Canal in Adolescent Girls.** Obstetric complications associated with young teenage mothers include increased risk of prolonged labor, uterine dysfunction, contracted pelvis, and cesarean section. These risks may be related to immaturity of the pelvis and the smaller size of the birth canal. Marquisa LaVelle Moerman (Univ. of Michigan, Dearborn) analyzed the growth and development of the birth canal in a longitudinal sample of 90 healthy middle-class girls aged 8 to 18 years. Examinations included physical measurement of four pelvic dimensions, detailed gynecologic history, and prior to 1950, annual radiographic study of the pelvis.

Compared with stature, the pelvic basin was found to grow more slowly and continuously through late adolescence. At menarcheal age (MA) 0 to 2, mean pelvic size was considerably smaller than mean adult pelvic size at age 18 years. Pelvic dimensions for the inlet of the pelvic basin (measure A), the interspinous diameter (measure B), and the maximum breadth of the sacral alae (measure C) for Ma 0 to 2 were significantly smaller than adult size, but the inferior breadth of the ischial tuberosities (measure D) was not significantly smaller at MA 2, compared with mean adult size. At MA 3, pelvic size for any of the four measures did not differ significantly from the adult size. Despite the likely onset of fecundity at an early MA, pelvic growth continued beyond the asymptote of stature (1% or less of growth remaining), with greater pelvic growth remaining at all ages (table).

PERCENTAGE OF GROWTH REMAINING IN YEARS AFTER MENARCHE*

	MA			
	0 (%)	1 (%)	2 (%)	3 (%)
<i>Body dimensions:</i>				
Stature	4.3	2.1	0.9	0.5
Weight	20.4	11.9	6.7	3.5
Bicristal hip diameter	9.6	5.7	3.3	1.4
<i>Pelvic diameters:</i>				
A. Inlet	13.0	7.0	3.9	1.7
B. Bispinous	18.2	12.6	8.9	6.0
C. Sacrum	12.4	7.4	3.2	2.4
D. Inferior ischium	14.0	5.0	3.0	0.8

*Calculated retrospectively from longitudinal series of 45 girls on basis of subject size at age 18.

(Courtesy of Moerman, M. L.: Am. J. Obstet. Gynecol. 143:528-532, July 1, 1982.)