

Williams
OBSTETRICS

Fifteenth Edition

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Williams **OBSTETRICS**

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Preface

The five years since the fourteenth edition of this textbook have witnessed the remarkable development, refinement, and application of a great variety of methodologies and technics to obstetric care. Indeed, within this period the subspecialty, Maternal-Fetal Medicine, has come into being and some obstetricians have now been officially certified to possess special competence in this arena. Chapter 13, Fetal Health, a new chapter, considers the application to clinical obstetrics of many of the methodologies and technics that have been recommended to monitor the status of the fetus.

The impetus for the increased concern for the intimate welfare of the fetus has been provided but in part by the availability of such monitoring technics. The widespread adoption of effective methods for population control and consideration of their impact upon the well-being of current and future generations of offspring have logically accelerated interest in modalities for preserving and improving the health of the fetus and newborn infant. It is apparent that the great majority of healthy parous women whose counterparts in the past practically always bore healthy infants are now limiting the number of their offspring. It follows that the health team providing care for the mother, fetus, and newborn infant currently must deal with an appreciably higher percentage of pregnancies in which the fetus is at in-

creased risk of unfavorable outcome unless an appropriate program for surveillance and at times active intervention is mounted.

The second major change during the past five years has been the development and especially the nearly universal availability of technics for population control. Abortion, admittedly a less than ideal method for achieving such, was legalized by the United States Supreme Court decision of 1973. Chapter 23 is now devoted entirely to the subject of abortion. Contraceptive technics, including sterilization, are considered in detail in Chapter 39.

While much new material has been included in this edition, careful considerations has been given to what might be deleted. Hopefully, a careful balance has been achieved allowing, among other things, the book to be of reasonable size.

Although we have attempted to avoid undue emphasis on our areas of special interest, we have, for several conditions, tried to provide in some detail methods of management that have been used extensively at Parkland Memorial Hospital with satisfactory outcomes. Our points of view in some circumstances undoubtedly differ from those of others who care for the woman and her fetus-infant. We do not mean to imply that alternate methods to those presented in this text are necessarily inferior.

The references included are extensive and, hopefully, will serve as a basis for

further inquiry for those who desire to do so. The index for this edition has nearly doubled in size, and, we hope, usefulness.

We have set into smaller type certain portions of the text, with the thought that some of them may be passed over by the reader the first time through, then incorporated in a second reading, and as reference material according to individual needs.

We are particularly grateful to Doctors F. Gary Cunningham, Johann Duenhoelter, Norman Gant, Juan Jimenez, Charles Rosenfeld, Rigoberto Santos, and Peggy Whalley of the faculty of the Department of Obstetrics and Gynecology, University of Texas Southwestern Medical School, for their many contributions to this edition.

We are especially indebted to Ms. Sandra

Hauschel for typing much of the manuscript, to Ms. Juanita Epperson who as departmental administrative service officer provided invaluable aid, to members of the Medical Art Department for many of the new illustrations, and to Ms. Theresa Kornak and her colleagues at Appleton-Century-Crofts for the meticulous attention they have devoted to the preparation of this text.

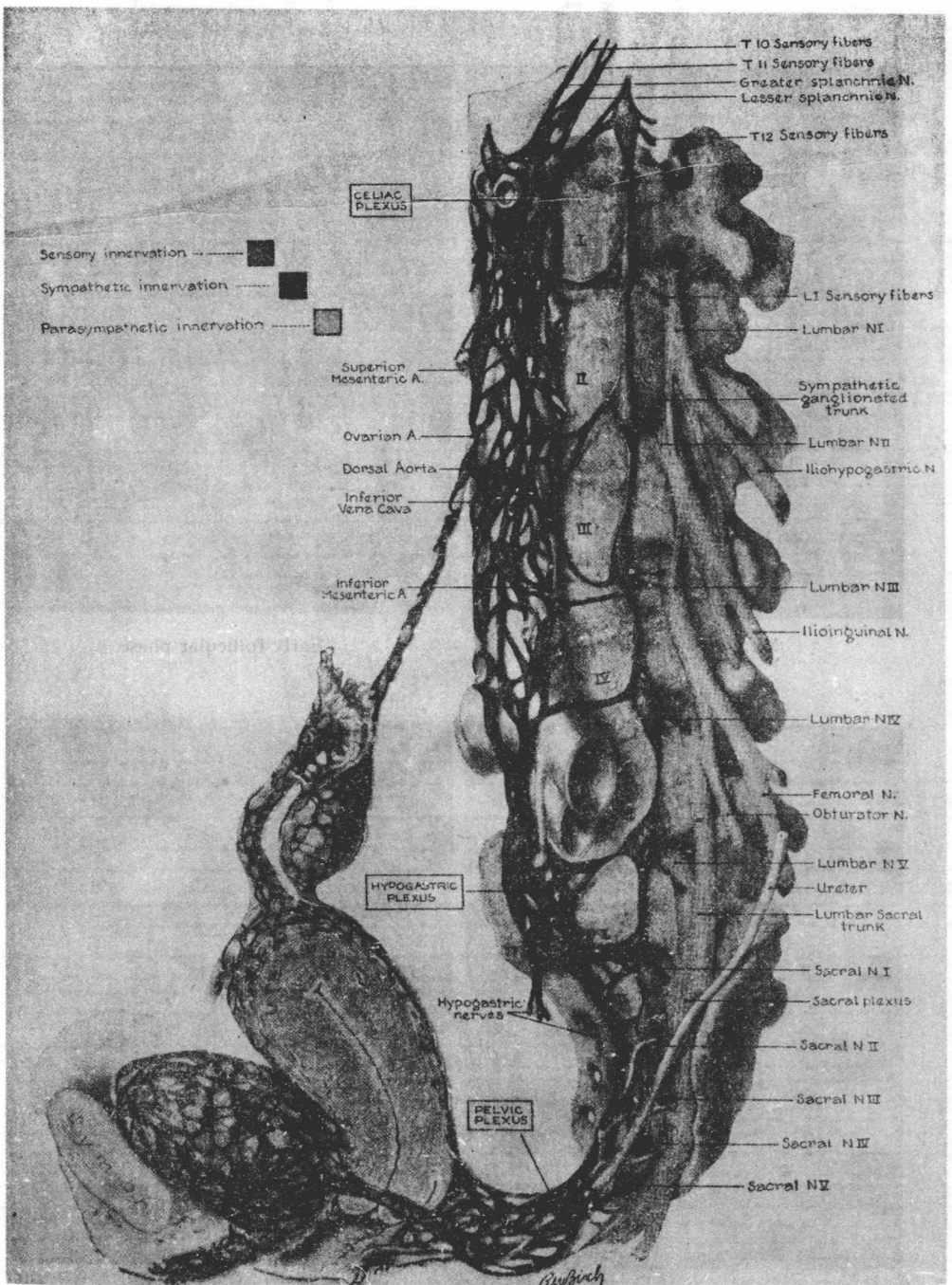
Finally, no amount of thanks can express our gratitude to Ms. Signe Pritchard for her myriad contributions beginning with manuscript and ending (?) with index.

Jack A. Pritchard

Paul C. MacDonald



CHAP. 2. FIG. 15. Blood supply of uterus, tubes, and ovaries (Ur., ureter; U.A. and U.V., uterine artery and vein; Ov. A. and Ov. V.; ovarian artery and vein).



CHAP. 2. FIG. 16. Nerve supply of the uterus (Symph, symphysis pubis).



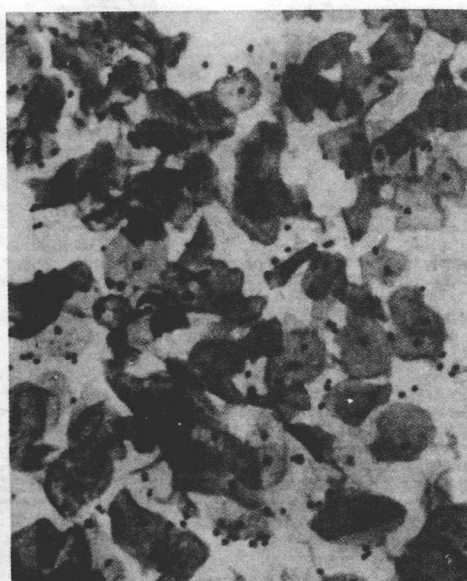
Menstrual phase.



Early follicular phase.



Advanced follicular phase.

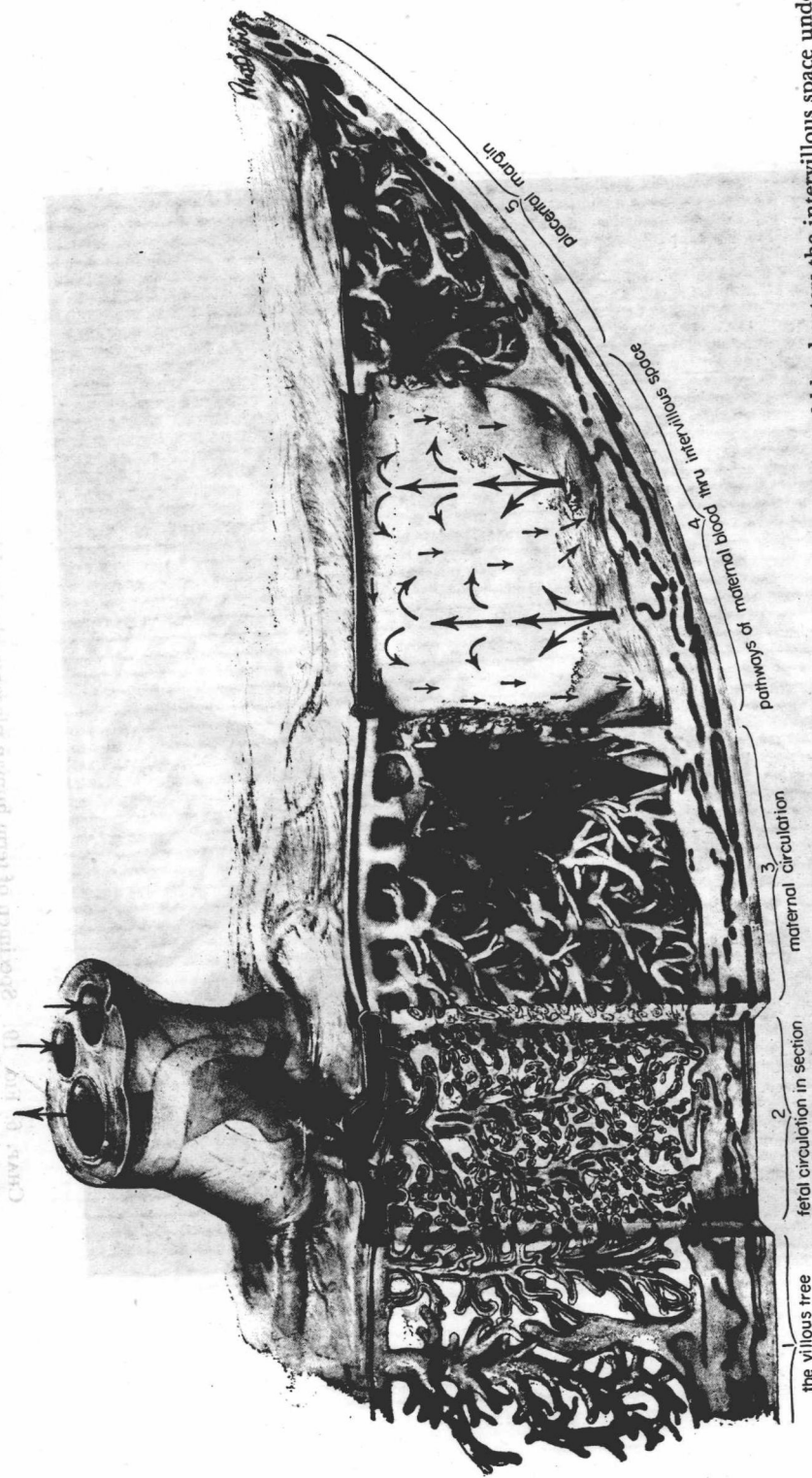


Luteal phase.

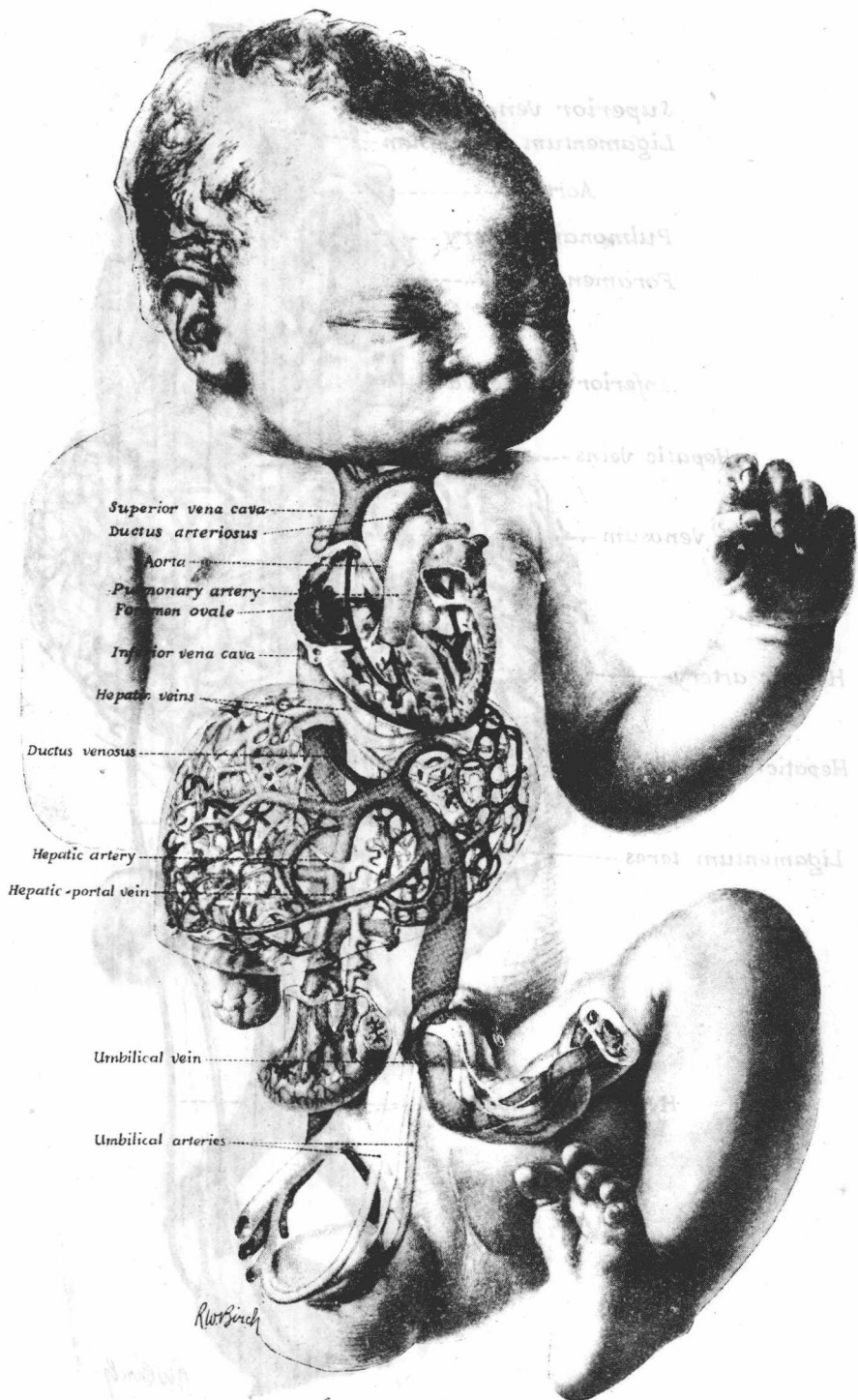
CHAP. 4. FIG. 12. Vaginal smears in normal menstrual cycle stained with OG6-EA36. Acidophilic cells red; basophilic cells blue-green. Photomicrographs colored by H. Murayama. (From Papanicolaou, Traut, and Marchetti. *The Epithelia of Woman's Reproductive Organs*. New York, Commonwealth Fund, 1948.)



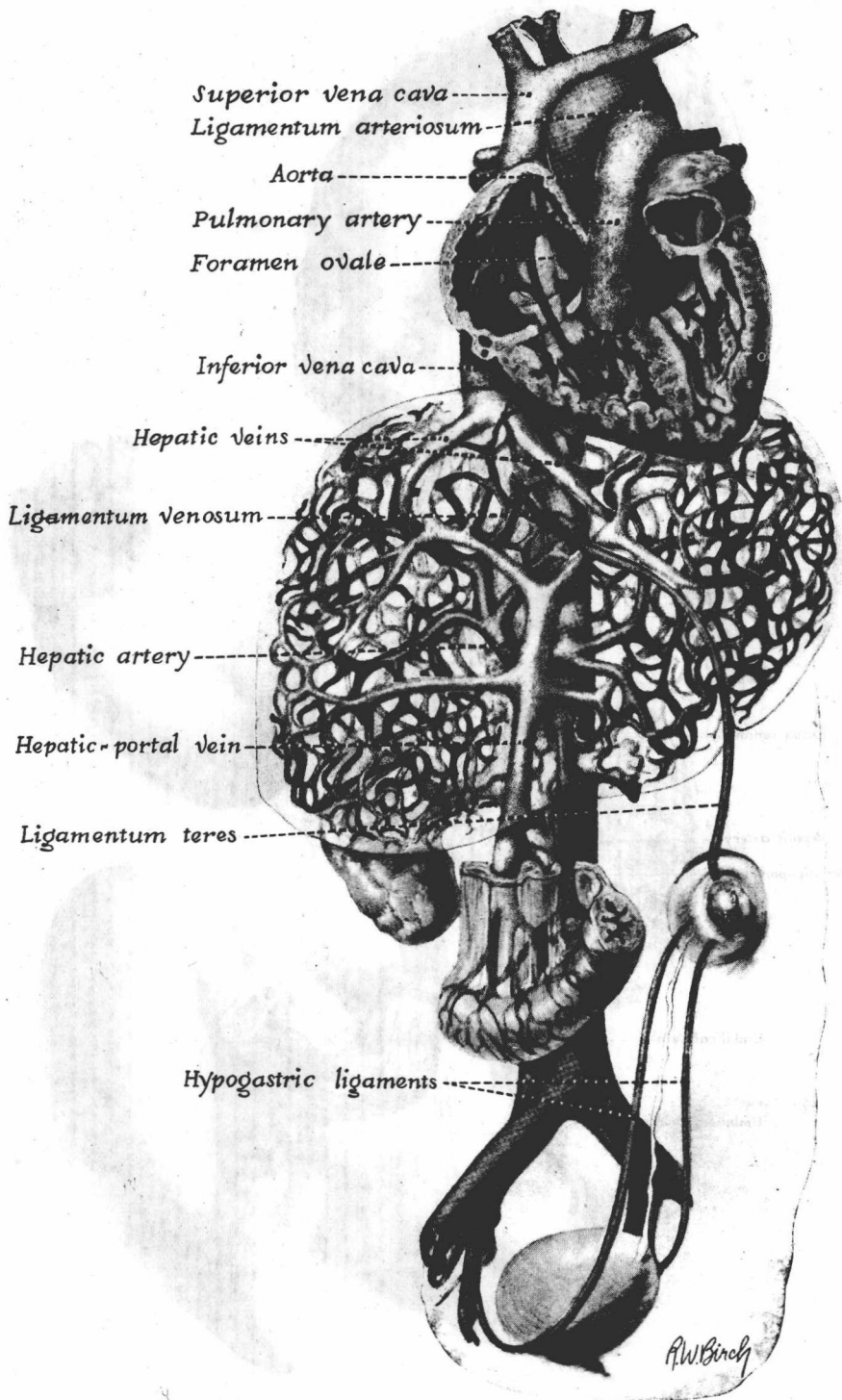
CHAP. 6. FIG. 19. Specimen of term human placenta obtained by corrosion. Fetal circulation viewed from the fetal side. (Prepared by Rudolph Skarda; courtesy of Abbot Laboratories.)



CHAP. 6. FIG. 20. A composite drawing of the placenta to show its structure and circulation: Maternal blood enters the intervillous space under the head of maternal arterial pressure. The entering blood is driven in funnel-shaped streams ("spurts") through the intervillous space where the pressure is low. As the maternal pressure dissipates, lateral dispersion of blood occurs. Metabolic exchange takes place as the blood flows around the chorionic villi. Inflowing arterial blood pushes venous blood out into the endometrial veins. (Drawing by Ranice W. Davis, Department of Art as Applied to Medicine, The Johns Hopkins University, for Dr. Elizabeth M. Ramsey. Reproduced by courtesy of Carnegie Institution of Washington.)



CHAP. 7. FIG. 8. Cardiovascular system of fetus.



CHAP. 7. FIG. 9. Cardiovascular system of infant after birth.

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