Doppler ultrasound is the most successful clinical innovation introduced into obstetrics and gynecology in the last few years. This functional biophysical technique has extended the limits of the specialty. It is now possible to record and analyze the hemodynamics of the blood supply of individual organs in gynecology and the fetoplacental unit in obstetrics. Thanks to cardiotocography and Doppler ultrasound, the black box of pregnancy now presents some quite sizeable illuminated peepholes. They are the basis for part of the considerable progress in prenatal and perinatal medicine.

In contrast to other methods the diagnostic and clinical value of Doppler ultrasound was demonstrated before its widespread acceptance. It is the method of choice for determining the sufficiency of the uteroplacental and fetoplacental circulations and for answering questions regarding the fetal response to various changes in its environment, such as the blood supply. In most cases differential analysis of the state of both arterial and venous circulation, combined with echocardiography, provides a reasonably accurate real-time image of the condition of the fetus, and allows suitable specific therapeutic measures to be undertaken.

Each of the editors has been repeatedly asked to provide an up-to-date book on Doppler ultrasound. In view of the increasingly complex nature of the subject they focused on Doppler ultrasound in obstetrics and gynecology, and in collaboration with other authors wrote this book to assist readers in their everyday practice.

It is inevitable that in such a dynamic field the new matter presented here will be called into question or overtaken within a short time by new research. We would like to encourage our readers not to spare us from constructive criticism, for only in that way can we make progress in caring for the women and children entrusted to us.

We would like to thank Thieme Verlag, especially Dr. M. Becker, for their productive collaboration, and our co-workers and families for their patience.

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Christof Sohn
Hans-Joachim Voigt
Klaus Vetter