

Cambridge University Press

978-0-521-73562-9 - Manual of Intrauterine Insemination and Ovulation Induction

Edited by Richard P. Dickey, Peter R. Brinsden and Roman Pyrzak

Frontmatter

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## Preface

This manual is intended for the general or family practitioner, as well as for gynecologists and specialists in infertility treatment. While treatment by in-vitro fertilization (IVF) and other advanced techniques attract the most attention and shape the public perception of infertility treatment, far more infertile couples achieve pregnancies with ovulation induction (OI) or combined ovarian stimulation and intrauterine insemination (IUI), the two techniques described in detail in this book, and which form the first line of infertility treatment. Moreover, they can be performed in almost any office or clinic, thus allowing patients to be treated by physicians and nurses already familiar with their general health, without the need to travel to distant specialty clinics. Many practitioners believe, from their time in training, that evaluation of infertile couples is too time-consuming and unrewarding, and that treatment is too complex to be part of their general or obstetric and gynecological practices. Nothing could be further from the truth. Infertility should be viewed, not as a diagnosis, but as a symptom of an underlying medical problem, affecting either one or both partners, which, if left untreated, will eventually affect their general health and emotional well-being.

The role of IUI and OI in the present era of IVF and intracytoplasmic sperm injection (ICSI) is the subject of Chapter 1. Although IVF and ICSI have made donor insemination unnecessary for many couples with male-factor infertility, it is still the method of choice for many couples when they are confronted with the cost and complexity of IVF and ICSI treatment, or if there is a total absence of sperm. Donor insemination is easy to perform, requires no special equipment, and may be the only procedure performed by many physicians who use this manual. Websites are listed in the chapter on donor insemination that provide access to United States and European sperm banks that ship internationally.

The initial step in effective infertility treatment is to make a diagnosis. This can be accomplished with a few simple and relatively inexpensive tests, as

explained in the early chapters of this manual. Chapter 2 is written by an excellent team of medical university urologists who explain the causes and treatment of male-factor infertility and erectile dysfunction. Chapter 3, by two clinical reproductive endocrinologists with many years of experience, describes easy and effective methods of diagnosing female-factor infertility. Chapter 4 describes equipping an office laboratory to perform semen analysis and to prepare sperm for insemination.

Chapter 5 reviews those sperm qualities that are necessary for pregnancy when IUI is performed, and describes in detail the methods for performing basic and more complex semen analysis. Chapter 6 describes and compares four methods of sperm preparation for IUI and an additional fifth method for selecting predominantly Y-chromosome-bearing sperm, concluding with a section on handling specimens from men positive for human immunodeficiency virus (HIV) and hepatitis C virus (HCV).

Chapters 7 and 8 review the pharmacodynamics of oral drugs and gonadotropins and describe in detail their use for OI. Chapter 9 complements the chapters on OI with an atlas of ultrasonographic pictures of follicle and endometrial changes throughout the cycle.

Chapter 10 describes the indications for insemination, how to time insemination to achieve the best results, insemination techniques including IUI and tubal perfusion, and concludes with a section on management of complications of IUI. Chapter 11 describes indications for cryopreservation of patient sperm and methods of cryopreservation and storage. Chapter 12 is devoted to donor insemination, and includes a detailed description of how to use cryopreserved specimens.

Chapter 13 is concerned with the many roles that nurses play in the treatment of infertile couples, in a chapter written by nurse practitioners themselves.

Chapters 14 and 15 describe methods of reducing the incidence of multiple births and of preventing and treating ovarian hyperstimulation syndrome

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(OHSS) and other complications of OI, and have been contributed by physicians who have written extensively on these subjects.

Chapter 16, by a clinical psychologist, explains how counseling helps infertile couples to deal with issues they face, such as feelings of inadequacy, loss and depression, and includes a list of printed and internet resources for both medical personnel and patients.

Chapter 17 deals with some of the legal and religious issues that confront physicians and couples – and single women – who wish to use donor sperm. The chapter includes a table that describes the laws relating to husband/partner and donor insemination

in 57 European, Asian, Middle Eastern, North and South American and African nations.

Throughout this manual we have endeavored to address practical aspects of treatments that will result in optimal results in terms of pregnancy outcome and safety, but we have tried not to neglect the pharmacological and physiological reasons for their use. We believe and hope that both generalists and specialists will find this manual helpful to their practices, and that it will therefore also benefit their patients.

Richard P. Dickey  
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