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BOOK REVIEW

Infections, Infertility, and Assisted Reproduction. Kay Elder, Doris J. Baker and Julie A. Ribes. Cambridge University Press, March 2011, 410 pages

This book covers medical microbiology from the point of view of experts in reproduction and is specifically targeted for scientists and clinicians working in assisted reproduction. The authors describe the purpose of the book as to select areas and topics in microbiology that are specifically relevant to assisted reproductive technology (ART) in order to provide a very basic background of facts and fundamental principles. This background can help to prevent contamination and transmission of disease in ART and limit the opportunities for microbial survival in embryo culture and cryopreservation systems. Thus, the book fills the gap which existed in the literature between microbiology and ART.

As indicated by Roger G. Gosden and Lucinda L. Veeck in their foreword to the book: "the relationships between microbes and human fertility are complex, fascinating and important for the practice of reproductive medicine. Unfortunately, and usually without advance warning, microbes occasionally enter the clinical laboratory through infected semen or vaginal tissue. When this occurs, a patient's treatment outcome may be seriously compromised because microbes can quickly deplete nutrients in culture media and alter the pH, and it would be irresponsible to knowingly transfer an infected embryo or semen to a patient. Bacterial and fungal growth are often obvious and easily tested, but how often do infectious agents go unrecognized and contribute to the problems of infertility, treatment failure and even possibly affect the child-to-be?"

The book is divided into three parts: Part I provides an outline of microorganism classification and identification. The first chapter in this section is a comprehensive introduction

that covers the history and gives an overview of both microbiology and assisted reproduction and ends with a glossary of terms. The following chapters deal with bacteriology, mycology including molds and yeasts, virology, prions and parasitology. Each of these chapters includes an Appendix of antimicrobial drugs and their modes of action.

Part II deals with Infections in Reproductive Medicine and focuses on microbes that are related to human reproduction whether by causing infertility such as Chlamydia or by jeopardizing reproductive safety such as HIV. This section includes six chapters which detail organisms that cause disease of the reproductive tract and those that are blood-borne pathogens, describing their etiology, pathogenesis, diagnosis, pathology and treatment.

Part III helps the reader to finally apply microbiology principles inside the assisted reproduction laboratory. It includes an in-depth coverage of infection and contamination control in the ART laboratory, handling of infectious agents in the ART laboratory and patient screening for prevention of contamination.

All chapters in the book are very nicely illustrated with numerous figures and tables which make the reading process both enjoyable and efficient.

In short, this book provides a comprehensive overview of microbiology in the context of ART, which makes it a practical and an up-to-date guide to infections in reproductive medicine. It is recommended for embryology and andrology laboratory staff, medical and biology students, clinicians and nurse professionals working in the field of ART.

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Kay Elder, Doris J. Baker, Julie A. Ribes. ART treatment is vulnerable to the hazard of potential infection from many different sources: patients, samples, staff and the environment. Culture of gametes and embryos in vitro provides multiple targets for transmission of potential infection, including the developing embryo, neighbouring gametes and embryos, the couple undergoing treatment and other couples being treated during the same period. This unique situation, with multifaceted opportunities for microbial growth and transmission, makes infection and contamination control absolutely crucial