
Preface

Dum spiro, spero [As long as I breathe, I hope]

Marcus Tullius Cicero

Cancer is not uncommon in men and women of reproductive age. In the USA alone, over 130,000 men and women below the age of 45 were afflicted with cancer in 2008. The compromised fertility that will be faced by many of these patients can result in significant psychosocial stress and in reduced quality of life; even long after the cancer has been successfully treated.

Fortunately, the rapid pace of scientific and technological discovery has increased the options available to men and women in need of fertility preservation. More than 30 years after the birth of the first child conceived by assisted reproductive technologies, we are now able to cryopreserve embryos, spermatozoa, and oocytes as well as testicular and ovarian tissue. In addition, the effect of gonadotoxic treatments on fertility is better defined and the use of medical interventions for fertility preservation is within reach. With increasingly complex modalities available for fertility preservation comes the need for a clear, concise, readable, and practical text to serve as a resource for healthcare providers.

This textbook has been written with the aim of providing an update on options for fertility preservation for both men and women. Within this context, this text reviews current therapeutic modalities in great detail and describes the biologic basis for available interventions. A key aspect of this volume is the valuable contributions from oncologists, obstetricians, psychologists, epidemiologists, and ethicists in addition to reproductive scientists and infertility specialists. This thorough resource thus recapitulates the multidisciplinary approach that is required to adequately provide patient care with a view to fertility preservation.

Following introductory chapters on the epidemiology and ethics of fertility preservation, this book is divided into two main sections that share a similar overall format while reviewing fertility preservation in female and then male patients. Each section starts with a chapter reviewing the gender-specific biology of the reproductive system within the context of fertility preservation. Then, the impact of gonadotoxic treatment on gonadal function and on the offspring is reviewed. Additional chapters in each section summarize established and experimental methodologies currently available for fertility preservation in both sexes, providing detailed protocols for laboratory

procedures. The resulting comprehensive text provides cutting edge science and evidence-based suggestions regarding potential interventions directed at fertility preservation.

This book is dedicated to our patients who, despite facing potentially lethal diagnoses and compromised quality of life, continue to hope, to live, and to pursue their dreams of parenthood.

New Haven, CT
Cleveland, OH

Emre Seli
Ashok Agarwal

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