Gonadal Tissue Cryopreservation in Fertility Preservation

Nao Suzuki • Jacques Donnez
Editors

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Preface

In young females, treatment of cancer can cause gonadal dysfunction, loss of fertility, and premature menopause. Cryopreservation of gametes and/or embryos and displacement or shielding of the ovaries during radiation therapy are the standard methods for preserving the fertility of young female cancer patients. In 2004, Professor Donnez reported achievement of the first live birth after ovarian tissue cryopreservation and transplantation. Subsequently, ovarian tissue cryopreservation and transplantation has come to be applied clinically as a new option for fertility preservation. In Europe and the United States, a new field named oncofertility has been established to revitalize the medical approaches to fertility preservation in young cancer patients.

It is anticipated that there will be further progress in fertility preservation techniques for young patients with cancer. Progress in fertility preservation is linked to the improved survivorship of young cancer patients and increases options for patients who wish to preserve their fertility. Development of optimum methods for fertility preservation will allow young cancer patients to concentrate on treating their disease. It is more essential than ever to provide patients who require gonadotoxic therapy with information about the risk of loss of fertility and the techniques that are available for fertility preservation. Accordingly, healthcare providers need to keep up with the latest information on fertility preservation, since rapid progress is occurring in this field. When Professor Donnez reported a successful live birth after transplantation of cryopreserved ovarian tissue, it was a breakthrough for both fertility preservation in young cancer patients and research into reproductive medicine. It is now 12 years since that report, and this book, *Gonadal Tissue Cryopreservation and Fertility*, is being published to provide young cancer patients in Asian countries, where oncofertility has attracted increasing attention in recent years, with the latest information in regard to fertility preservation. I would like to express my deepest gratitude to Professor Donnez, who served as a coeditor of this book. He has been my mentor and has provided willing cooperation during the publication process. I also express my heartfelt thanks to Ms. Makie Kambara and Ms. Kanako Honma at Springer Japan KK,

who gave me the precious opportunity to publish this book. I sincerely hope that young cancer patients can beat their disease and that we can achieve a better quality of life for the survivors.

Kawasaki, Kanagawa, Japan Nao Suzuki

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