Cytoreductive Surgery in Gynecologic Oncology: A Multidisciplinary Approach 2010

Editor

Yusuf Yildirim

Aegean Obstetrics & Gynecology Education and Research Hospital, Department of Gynecologic Oncology, Gaziler Cad., No. 468, Yenisehir, Izmir, Turkey



Transworld Research Network, T.C. 37/661 (2), Fort P.O., Trivandrum-695 023 Kerala, India

Published by Transworld Research Network

2010; Rights Reserved Transworld Research Network T.C. 37/661(2), Fort P.O., Trivandrum-695 023, Kerala, India

Editor Yusuf Yildirim

Managing Editor S.G. Pandalai

Publication Manager

A. Gayathri

Transworld Research Network and the Editor assume no responsibility for the opinions and statements advanced by contributors

ISBN: 978-81-7895-484-4

Contents

Chapter 1	
The place of gynaecologic cancers in peritoneal surface	
oncology concept	1
Naoual Bakrin and Olivier Glehen	
Chapter 2	
Surgical anatomy of upper abdominal solid organs for gynecologic	
oncologists	13
Yusuf Yildirim and Emre Gultekin	
Chapter 3	
Cytoreductive surgery for ovarian cancer	35
Philipp Harter, Jacobus Pfisterer and Andreas du Bois	
Chapter 4	
Surgical and chemotherapeutic cytoreduction for advanced	
primary and recurrent ovarian cancer, the Washington	
Cancer Institute approach	51
Paul H. Sugarbaker	
Chapter 5	
Hyperthermic intraperitoneal chemotherapy (HIPEC) in optimally	
cytoreduced peritoneal carcinomatosis of gynecology origin:	
Does it provide survival advantage?	73
Eelco de Bree, Dimitris D. Tsiftsis and John Melissas	
Chapter 6	
The role of cytoreductive surgery for non-genital tract	
metastases to the ovary	101
Leszek Gottwald, Janusz Piekarski and Arkadiusz Jeziorski	

Chapter 7 Cytoreductive surgery in endometrial cancer and uterine sarcomas <i>Stefanie M. Ueda and Robert E. Bristow</i>	123
Chapter 8 The role of surgery in the management of high-risk gestational trophoblastic neoplasia <i>John R. Lurain</i>	153
Chapter 9 The role of cytoreductive surgery in cervical cancer: Is there a benefit of retroperitoneal lymph node debulking in advanced disease? <i>Waldo Jiménez and Allan Covens</i>	161
Chapter 10 The role of cytoreductive surgery in vulvar cancer. Is there an indication for aggressive surgical approach in FIGO Stage III/IV disease? <i>Anthony Proietto and Ganendra Raj</i>	173
Chapter 11 The place of pelvic exenteration as a cytoreductive procedure in advanced gynaecologic malignancies <i>Markus C. Fleisch, Daniel T. Rein and Wolfgang Janni</i>	179
Chapter 12 The role of video-assisted thoracic surgery (VATS) and intrathoracic cytoreductive surgery in gynecologic malignancies <i>John P. Diaz and Dennis S. Chi</i>	201
Chapter 13 Laparoscopic and robotic assisted laparoscopic cytoreductive surgery in gynecologic oncology <i>Frédéric Marchal, Philippe Rauch and François Guillemin</i>	213
Chapter 14 Critical care and pain management in patients who have undergone cytoreductive surgery for gynecologic malignancies <i>A. Le Gouez, J. Dick and D. Benhamou</i>	233

Preface

Despite the crucial advancements in treatment with chemotherapy, radiotherapy and biological agents, main treatment method in gynecologic cancers is surgery as in all other solid tumors.

The history of gynecologic cancers is very old. Evidences of first human gynecologic cancers were discovered in Egyptian mummies from the 3000 BC. Granville (1826) dissected mummified remains and discovered an ovarian mass later thought to be a malignant cystadenocarcinoma of the ovary. The history of cytoreductive surgery in gynecologic cancers goes back to the end of the 18th century. The application of modern cytoreductive surgery in gynecologic cancers was initiated in 1834 by Meigs. Later, significant progress was made in cytoreductive surgery by the studies performed by the Gynecologic Oncology Group (GOG) and the International Federation of Gynecology and Obstetrics (FIGO) and many other authors. Currently, resection of almost every organ is performed for cytoreductive surgery of ovarian cancer and every day we witness new technical improvements enforcing the limits of our imagination. Besides, cytoreductive surgery has been applied not only in the treatment of ovarianfallopian-peritoneal cancers, but also in the treatment of endometrial and other gynecologic cancers. Theoretical rationale of cytoreductive surgery is to improve the chemotherapy response (by reducing tumor load before chemotherapy, increasing tumor perfusion and growth fraction), to improve the immune function and to make possible changes in tumor biology.

One of the other recent advances in Gynecologic Oncology is that ovarian cancer has constituted a model within the concept of "Peritoneal Surface Oncology" (Cytoreductive Surgery combined with Hyperthermic Intraperitoneal Chemotherapy-HIPEC) which has been developed since 1990's for the treatment of peritoneal carcinomatosis. This approach is gradually becoming the standard management both for gynecologic and non-gynecologic peritonitis carcinomatosis cases. Scientific studies on the extensive cytoreductive surgery of ovarian cancer have played a significant role in the development of this concept.

This book aims to introduce the role of cytoreductive surgery in gynecologic cancers through a multi-disciplinary approach. Many famous scientists from US, Canada, European Countries and Australia have participated in this special work. I would like to express my heartfelt thanks to all authors and co-authors who contributed to this book by sparing their valuable time in spite of their busy academic schedules. It has been my pleasure to work with them in this project and I look forward to working together again in other projects in the future. I hope this book to be useful for the specialists, fellowships and assistants in all disciplines related to the treatment of gynecologic cancers.

I dedicate this book to my beloved wife and son.

January 2010 Izmir **Yusuf Yildirim**