

# **Cancer of the Ovary**

Ovarian cancer is not only the commonest but also the most lethal gynaecological malignancy, partly because the majority of patients present with advanced disease. Nevertheless, the management of patients with ovarian neoplasms has changed substantially recently, with improved survival due to better screening strategies, major advances in chemotherapy and the constantly evolving role of surgery.

Central to these advances has been the development and application of imaging in diagnosis, staging and follow-up. All forms of imaging play a critical role not only in the day-to-day management of the patient but also in the development of future strategies. This volume provides a detailed review of all relevant imaging modalities and treatment options, enhancing understanding of the role of imaging for all involved in patient care.

#### About the series

Each volume in Contemporary Issues in Cancer Imaging - A Multidisciplinary Approach is edited by an expert guest editor with contributions from all members of the multidisciplinary team, bringing together expertise from many specialities to promote the understanding and application of modern imaging in overall patient management.

#### Forthcoming titles in the series:

Colorectal Cancer
Lung Cancer
Carcinoma of the Kidney
Carcinoma of the Esophagus
Carcinoma of the Bladder



# **Contemporary Issues in Cancer Imaging**

A Multidisciplinary Approach

Series Editors

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# Cancer of the Ovary

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# **Contents**

Contributors Series Foreword Preface to Cancer of the Ovary		<i>page</i> vii ix xi
1	Epidemiology of Ovarian Cancer Karim Elmasry and Simon Gayther	1
2	The Pathological Features of Ovarian Neoplasia  David Lowe	20
3	Ovarian Cancer Screening Adam Rosenthal, Usha Menon and Ian Jacobs	47
4	Surgical Management of Patients with Epithelial Ovarian Cancer Janos Balega and John Shepherd	69
5	Medical Treatment of Ovarian Carcinoma Rebecca Bowen and Maurice Slevin	82
6	Ultrasound in Ovarian Carcinoma Judith Webb	94
7	MR Imaging in Ovarian Cancer Aslam Sohaib and Rodney Reznek	112
8	CT in Carcinoma of the Ovary John Spencer	132
9	PET and PET/CT in Ovarian Cancer Norbert Avril	156
Index		173

V



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vii



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## **Series Foreword**

Imaging has become pivotal in all aspects of the management of patients with cancer. At the same time it is acknowledged that optimal patient care is best achieved by a multidisciplinary team approach. The explosion of technological developments in imaging over the past years has meant that all members of the multidisciplinary team should understand the potential applications, limitations and advantages of all the evolving and exciting imaging techniques. Equally, to understand the significance of the imaging findings and to contribute actively to management decisions and to the development of new clinical applications for imaging, it is critical that the radiologist should have sufficient background knowledge of different tumours. Thus the radiologist should understand the pathology, the clinical background, the therapeutic options and prognostic indicators of malignancy.

Contemporary Issues in Cancer Imaging — A Multidisciplinary Approach aims to meet the growing requirement for radiologists to have detailed knowledge of the individual tumours in which they are involved in making management decisions. A series of single subject issues, each of which will be dedicated to a single tumour site, edited by recognised expert guest editors, will include contributions from basic scientists, pathologists, surgeons, oncologists, radiologists and others.

While the series is written predominantly for the radiologist, it is hoped that individual issues will contain sufficient varied information so as to be of interest to all medical disciplines and to other health professionals managing patients with cancer. As with imaging, advances have occurred in all these disciplines related to cancer management and it is our fervent hope that this series, bringing together expertise from such a range of related specialties, will not only promote the understanding and rational application of modern imaging but will also help to achieve the ultimate goal of improving outcomes of patients with cancer.

Rodney Reznek

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# **Preface to Cancer of the Ovary**

Ovarian cancer is not only the commonest but also the most lethal gynaecological malignancy, partly because the majority of patients present with advanced disease. Nevertheless, as is true for so many cancers, the management of patients with ovarian neoplasms has changed substantially over the years. Several factors have contributed to this: for example, major advances in chemotherapy have resulted in improved survival; the role of surgery is constantly evolving and being refined. Many challenges are being addressed in order to lessen the devastating effects of advanced disease: screening strategies are being introduced and detection of early stage disease may offer an opportunity to reduce mortality. Also, a better understanding of the interactions between environmental and molecular biological events that cause or protect against ovarian cancer may lead to clear clinical benefits in prevention, early detection and treatment of the disease.

There is little doubt, however, that central to these advances has been the development and application of modern imaging, whether it be in diagnosis, staging or follow-up. All forms of imaging, including ultrasound, MRI and CT, play a critical role not only in the day-to-day management of the patient but also in the development of future strategies. Position emission tomography may also in future play a role.

This issue of *Contemporary Issues in Cancer Imaging* — A *Multidisciplinary Approach* deals with all these important developments. Increasingly, there is a need for the radiologist to understand the clinical issues that prompt the need for imaging. Equally, it is essential that clinicians understand the contribution that imaging can make to the care of the patient. I hope that, in keeping with the ethos of this series, bringing together the contributions of experts in each of these disciplines will promote a better understanding of the role of imaging for all involved in the management of patients with ovarian cancer.

Rodney Reznek *London* 

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