

THERAPEUTIC APPROACHES IN COMMON OBSTETRICS  
AND GYNECOLOGICAL DISORDERS

# **Endometrium and Related Endouterine Pathologies**

**An Essential Examination  
for a Modern and  
Integrated Approach**

**Liliana Mereu, M.D., Ph.D.**

**Salvatore Giovanni Vitale, M.D., Ph.D.**

NOVA



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**Liliana Mereu**

**Salvatore Giovanni Vitale**

Editors

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# Foreword

The endometrium, the thin inner lining of the uterus, is a dynamic tissue essential for female reproductive health. It is subject to a wide range of alterations, which can vary from benign conditions, such as hyperplasia and polyps, to malignant diseases, such as endometrial carcinoma, one of the most common neoplasms in women.

Endometrial pathology represents a diagnostic and therapeutic challenge for clinicians and researchers. Its complexity lies in the diversity of clinical manifestations, the need for accurate and timely diagnosis, and the selection of a personalized treatment approach based on the specific characteristics of each patient.

This book aims to provide a comprehensive and up-to-date overview of both benign and malignant endometrial pathology. The most recent knowledge and the strongest scientific evidence have been gathered to offer readers a useful and practical tool.

The text is divided into chapters that address the various pathological entities, from the most common to the rarest, with a particular focus on diagnosis, clinical management, and therapeutic strategies. Considerable space has been dedicated to imaging, facilitating the understanding of histopathological and clinical aspects.

It is intended for gynecologists, pathologists, oncologists, radiologists, and all healthcare professionals involved in the diagnosis and treatment of women with endometrial disorders. I am confident that it will serve as a valuable support in daily clinical practice and as a stimulus for further research and in-depth study.

I extend my congratulations to all those who contributed to the realization of this work: the authors, for their expertise and dedication; the collaborators, for their invaluable assistance; and the editors, for their professionalism and sensitivity.

Aware that medicine is constantly evolving and that new discoveries and scientific advances will necessitate a future revision of this text, I am

nonetheless certain that this first edition represents an important reference for the scientific community and a tangible contribution to improving women's health.

*Paolo Scollo*  
*Full Professor of Obstetrics and Gynecology,*  
*Rector, University of Enna "Kore," Enna, Italy*

## About the Editors

### Liliana Mereu, MD, PhD



Professor Liliana Mereu, graduated in medicine and surgery in 2000 and specialized in Ob&Gyn in 2005 with top marks from the University of Pavia. In 2015, she obtained a doctorate in biotechnology in Ob&Gyn at the University of Siena. She is currently an Associate Professor of Obstetrics and Gynecology, on the Faculty of Medicine and Surgery of the University of Catania, Department of General Surgery and Medical-Surgical Specialties, and is Director of the Obstetrics and Gynecology Unit of the “*Gaspare Rodolico-San Marco*” University Hospital in Catania.

Professor Mereu is the author of over 180 published works. She participates in numerous national and international research groups in the field of gynecological oncology, endometriosis, urogynecology and new minimally invasive surgical technologies.

She has been elected to the boards of national and international scientific societies. She is a director of a level II master's degree program and a member

of a doctorate teaching council. She has won national and international recognition awards in the gynaecologic field and minimally invasive surgery. She has participated as scientific director, scientific committee, speaker, moderator, expert, live surgery operator in more than 200 national and international conferences.

She has focused her activity on minimally invasive surgery thanks also to her attendance at national and international institutes. The high level she has achieved is demonstrated by her numerous attendances at national and international conferences. Over the years, she has dedicated herself to teaching the most advanced surgical techniques through teaching positions at national and international schools.

## **Salvatore Giovanni Vitale, MD, PhD**



Salvatore Giovanni Vitale is Professor of Obstetrics and Gynecology in the Faculty of Medicine and Surgery at the University of Catania (Italy), Department of General Surgery and Medical-Surgical Specialties, and Consultant in the Obstetrics and Gynecology Unit at the “*Gaspare Rodolico-San Marco*” University Hospital in Catania. Born in Catania, Italy, on August 30, 1984, he earned a *Cum Laude* degree in medicine and surgery from the University of Catania (Italy) in 2009, where he also specialized with honors in Gynecology and Obstetrics in 2015, before completing a PhD in Medical and Surgical Biotechnologies at the University of Messina (Italy) in 2018.

His main clinical and research interests include intracavitary uterine pathologies, hysteroscopy and minimally invasive surgery, female infertility, and gynecological endocrinology. He has patented several hysteroscopic mechanical instruments, among which the “*biopsy snake grasper sec. VITALE*” stands out, successfully marketed and distributed worldwide. During the 15<sup>th</sup> Congress of the European Society of Gynecology (ESG) held in Amsterdam, he was awarded the *Alice and Albert Netter Prize* for developing this innovative device, recognizing him as the best young European researcher for his scientific and clinical merits, as well as for his contribution to technological advancement in hysteroscopic instrumentation.

He has been and continues to serve as Principal Investigator (PI) and Co-Investigator in numerous national and international research projects, many of which have been funded by prestigious Research Institutes and Universities through rigorous peer review. He has authored over 300 papers published in PubMed-indexed international peer-reviewed journals, as well as several monographs and chapters in international medical textbooks.

The excellence of his scientific output has earned him continuous inclusion, since 2019, in the “*World’s Top 2% Scientists*,” a ranking compiled by Stanford University (Ioannidis et al.) in collaboration with Elsevier (Scopus).

He is also an advisor and reviewer for prestigious national and international Research Institutes and currently serves as an editor for several high-impact gynecologic journals, including *Archives of Gynecology and Obstetrics*, *International Journal of Women’s Health*, *Gynecologic and Obstetric Investigation*, *Minimally Invasive Therapy and Allied Technologies (MITAT)* and *Advances in Therapy*, among others.



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