Prophylaxis and Early Detection of HPV-Related Neoplasia
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Specific types of human papillomaviruses (HPVs) are nowadays officially classified as carcinogenic to humans by the International Agency for Research on Cancer. Already in the seventies of the last century, Harald zur Hausen postulated a possible causal role of papillomavirus infections for cervical cancer. This hypothesis was then substantiated by pioneering work in his laboratory, revealing the heterogeneity of this viral family and discovering HPV16 and HPV18 DNA in cervical cancers. In 2008, Harald zur Hausen was honored with the Nobel Prize for these outstanding achievements.

The knowledge about the causal role of papillomaviruses in cervical cancer development triggered extensive studies to allow a better prevention of this disease. Standardized HPV tests were developed to support the sensitive early detection of precancerous lesions in the frame of cervical cancer screening programs as a measure of secondary prevention and prophylactic vaccines were developed for primary prevention of HPV infection. These intriguing perspectives raised great public interest but the wide use in public health strategies is still under debate.

In Germany, the HPV-Management Forum was established as a multidisciplinary working group of the Paul- Ehrlich- Gesellschaft für Chemotherapie, consisting of individuals experienced in basic and clinical HPV-related sciences. It published evidence-based guidelines for prophylactic vaccination against HPV-associated neoplasia (http://www.hpv-impfleitlinie.de) [1] and organizes certified courses on HPV-associated neoplasias to provide broad and topical information on the biology, epidemiology, diagnosis, treatment, and prevention of HPV infections and associated diseases for clinicians and practitioners, pathologists, and laboratory physicians. In the meantime, there is sufficient evidence for carcinogenic activity of HPV in the vulva, vagina, penis, anus, oral cavity, oropharynx and tonsils so that the course is not only interesting for gynecologists, but also for dermatologists, urologists and ENT specialists.

This book is mainly based on the continuously updated lectures of the HPV-Management Forum course. I would like to thank all of my colleagues who contributed to this work. It is hoped that the solid and topical contents of this book will also contribute to an objectification of discussions on HPV screening and vaccination in public health politics.

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Reference