

## BOOK REVIEWS

***Human Papillomavirus. Bench to Bedside* by Ramírez-Fort M.K., Khan F., Rady P.L., Tyring S.K., ISBN: 978-3-318-02526-2, 272 pages and 61 fig., 55 in colour, 15 tab, S. Karger AG, 2014.**

The updated book about HPV by Ramírez-Fort et al. is really welcome! This is a scientific field where things happen very fast not least because of the introduction of HPV vaccines, and texts just a few years old are already out of date. Unique with this book is that it covers both basic science as well as clinical aspects. Illustrative clinical and histological pictures make the book even more interesting.

About 150 HPV types have been identified, and the first chapters give an interesting history about the discovery of the virus, taxonomy and its life cycle. The oncogenic potential and biological mechanisms are complex, but have in this book been explained in a comprehensible way. Immunological aspects of the host response to the viral antigens have lately garnered much interest, and have been covered in a separate chapter. Serological studies exist, but much is still unknown about the immunological response and its importance for both protection and clearance of infections.

Although the majority of viruses are skin types, the natural history of the skin-related HPV types has not been extensively studied. At least 40 HPV types are known to infect mucosal area, and many studies have been conducted in this area. Asymptomatic anogenital HPV infection is extremely common, especially among the younger sexually active age groups. Over 90% of anogenital infections are cleared spontaneously within a few months or few years, and are asymptomatic. Some infections cause disease; in some cases leading to premalignant/malignant lesions. Cervical cancer is the most important HPV-related cancer form, but anal, penile, vulvar, oral and a few squamous cell skin cancers have also been found to be HPV-related, of which HPV 16 is the most important oncogenic HPV type.

Clinical presentation and diagnosis of the anogenital lesions are also discussed, and both pharmacological and surgical treatment modalities are presented. It is a big clinical problem that only visible lesions can be treated, and recurrences occur frequently due to the presence of latent virus. The same problem exists for treatment of skin lesions, exemplified in the book both by different forms of skin warts as well as the rare autosomal recessive inherited epidermodysplasia verruciformis. Management of the HPV-related cancers (gynaecological, anal and head/neck) is also discussed, with examples of different treatment options.

A growing interest about oral HPV infection, transmission and relation to oral cancer has occurred during recent years. This is covered by epidemiological data, characterisation of different oral lesions and their treatment. An important clinical problem is also HPV infection and immunosuppression. The role of HPV-related disease for HIV-positive individuals and organ transplant recipients is stressed. An overview of laboratory diagnosis of HPV is also included; most data known in this field are derived from cervical cancer prevention measures. HPV testing in clinical routine is rarely implemented in routine dermatologic practice.

Finally the last chapter deals with vaccines, which has been a success story. We now have effective prophylactic virus-like particle-based vaccines and subsequent developments in second-generation vaccines will lead to broader protection. Therapeutic immunisation strategies are needed to fully cure clinical disease and HPV-associated malignancies, and will hopefully come in the future.

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