

Progress in eyelid diseases and surgery

The eyelids protect the eyes and therefore vision. Diseases altering the eyelid structure or function threaten sight as well as cosmesis. An updated comprehensive understanding of eyelid anatomy, physiology, pathology, diagnostics, and therapeutics is fundamental to a patient's physical and psychological well-being. Eyelid diseases are involved in multiple pathological conditions. In this special series of *Annals of Eye Science*, the distinguished authors provide an update on the prognosis and treatment of eyelid diseases due to tumor, orbital fracture, congenital ptosis, and prosthetic eyes, among others, and introduce three-dimensional (3D) anthropometry to evaluate the periocular morphology pre- and postoperatively.

Looking at basal cell carcinoma (BCC), by far the most common human skin cancer, Dr. Guo and associates show a comprehensive overview of the recent research progress of molecular pathogenesis, clinical classification and TNM stage, and therapeutics of periocular BCCs. Dr. Jonas and co-authors discuss targeted treatment strategies for ocular malignancies. Dr. Xing and colleagues summarize the surgical approaches of orbital fractures and the complications associated with the eyelid. To prevent eyelid malposition complications, they also provide valuable suggestions, e.g., appropriate orbital fracture approach, delicate tissue management, technical expertise, meticulous hemostasis, and conservative treatment with taping, lubricating ointment, and steroid. Prof. Kratky reviews the different categories of congenital ptosis and briefly describes the different surgical approaches, emphasizing on how to choose the right condition. Dr. Rokohl and co-authors evaluate the reasons for socket discomfort in anophthalmic patients and discuss the therapy options for successful long-term rehabilitation, e.g., an early supply with an eye prosthesis, adequate treatment of complications, and attention to psychological aspects. Dr. Kopecky and associates present a review article on the bioengineered dermal substitutes for periocular defects resulting from various etiologies.

Eyelid surgery is widely and extensively applied in oculoplastic and reconstructive surgeries. Dr. Fan and co-authors delve further into the ocular surface and tear film changes after various eyelid surgeries. Dr. Guo and colleagues describe the application and evaluation of increasingly fashionable 3D anthropometry in the periorbital region for three-dimensionally assessing linear, curvilinear, angular, and volumetric measurements. In the future, reliable and accurate 3D imaging techniques and standardized analyzing protocols may find applications in various perspectives of periocular pathological disorders.

In conclusion, this special series of *Annals of Eye Science* has provided a comprehensive update on eyelid disease and surgery. We hope that the articles in this special series, with invited experts from Asia, Europe, and America, will benefit patients and stimulate further thought and discussion in understanding and managing eyelid-related diseases.

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