

“Enjoy examining the eye.... It is a privilege”
J Kratchmer

Dear reader,

The editorial board took a decision to dedicate different editions of our journal to different subspecialties. In the last issue we put accent on paediatrics and in the current one – on ophthalmology and related subspecialties. The eye is one of the most interesting organs in the human body for variety of reasons:

- ❖ Anatomically it is a complicated optical system that transfers optical signals into electrical impulses via complicated biochemical pathways and sends the information to the brain;
- ❖ The eye, via its dynamic optical element – the lens – allows precise focusing at any distance;
- ❖ The retina contains in a space of microns the first 3 neurons of the optical pathways;
- ❖ The eye does not regenerate, but transplantation of the cornea is one of the historically and currently most often performed transplantations in the human body;
- ❖ With time the eye ages and one of the consequences is presbyopia (decreased ability to focus on near objects) and subsequently cataract, however, practical knowledge and experience in that direction is so advanced that cataract surgery is the most often performed and the most successful surgery ever;
- ❖ As the eye has precise optical properties, a variety of lasers are used for diagnostic and therapeutic procedures.

It is not difficult to make this list endless and, as all professionals, eye doctors are very fond of their subspecialty. It is really a privilege to work with eyes and give sight. One often does not understand how important eyesight is. Please close your eyes for 5 minutes and try to perform your everyday routine like eating, brushing your teeth, organizing your desk, etc. This short drill would encourage everyone to think about eye care, prophylaxis and protection. Eye care practitioners are given the honor to help protect the eye and treat eye disease that might have devastating life consequences for each individual.

Several important subjects are covered in this issue. The first article is an extensive study on structure and reasons of low vision and blindness in North-East Bulgaria. This retrospective search and analysis demonstrates the distribution of blindness in young and older age and highlights key predictors for progressive visual loss. Most importantly it provides clear recommendation for improved diagnostics and prevention and can be implemented directly into everyday clinical practice.

The second paper is dedicated on the most often performed surgical procedure in the world. It was a bit more than 60 years ago when one of the most established surgeons was sitting in a dental chair, having his biannual ultrasound teeth cleaning. It took a lot of experimentation and courage before he established phacoemulsification – a routine surgery at present. However, due to variety of social and cultural reasons, in our country many patients wait until cataract is so advanced that surgery is performed on urgent basis. This makes the surgery very complex, and some of the challenges and elegant measures to overcome them are presented in a paper by Assoc. Prof. D Stateva.

As already mentioned optics is important, however, visual perception requires normal photoreceptors and neuronal pathways. The most important structure for central vision is the macula. It is a delicate structure subject of very complex surgery, which is not only challenging and difficult but also associated with a higher risk of complications. Vitrectomy is one of the most delicate procedures, requiring very high level of training. In Bulgaria, there is a limited number of experienced vitreoretinal surgeons, and our journal is privileged to present the novel method for managing macular holes presented by Dr I Shandurkov.

Interestingly the eye and associated pathology may also have an important social impact. It is very important to have efficient eye contact during conversation and socialization, and disfigurement of the lids

makes an unpleasant impression. Although not life threatening, basal cell carcinoma has negative cosmetic consequences and a risk for local infiltration. The paper by Assoc. Prof. Z Zlatarova is dedicated to these issues.

There are many discussions on the subject of eye comfort. In general, we need visual comfort (to see clearly), perceptual comfort (to feel our eye normal) and cosmetic comfort (our eyes to look normal). There is no other eye condition with such a wider and increasing distribution, affecting all types and levels of comfort such as the “dry eye”. Dr Marinova presents an innovative study using in vivo confocal microscopy and demonstrates microstructural changes of the living ocular surface utilizing this non-invasive technology.

Another novel technology is implemented in a paper by Dr Neshkinski and Dr Boyadziev. The UV damage of the skin is well known and the Wood’s lamp is being used in dermatology for many years. The authors utilize a similar custom made device by the famous Australian ophthalmologist Prof. Minas Coroneo and for the first time estimate the UV damage of the ocular surface in Bulgaria. Moreover, by developing a comprehensive questionnaire, the authors correlate the damage with personal habits and draw an important conclusion that we do not protect our eyes wisely enough.

Last but not least, a human is not a walking eye. The eye is not only a part of the nervous system, it is also integrated into the human body and can be impacted by variety of systemic conditions. That is the reason why we included two novelties from the neuro-ophthalmologist Assoc. Prof. A Tzukeva and neurologist Prof. A Kaprelian. Although both conditions are very rare, knowledge about them is extremely important for both specialties. In this direction we have also included two more general papers, related to early diagnostics of congenital condition by Stoeva I et al, and an interesting neurosurgical report with traumatic central cord syndrome by Haritonov D et al.

We hope that all our readers enjoy the specialized issue dedicated to the eye and sight and also believe that this could be an inspiration for more interesting collaborative projects to improve our understanding of diseases and protect the entire human population. This is the single way to improve our quality of life for longer and better.