Nikolay Surchev, MD, PhD European Leadership Development Program Class of 2013-2015 Project Abstract

Development of a national corneal graft register

Corneal transplantation remains the main treatment option for corneal blindness. While the corneal graft usually has good chances of survival there are a number of aspects which can influence the outcome of every transplant. In order to evaluate the impact of the various surgical techniques, preand postoperative factors in corneal transplantation a lot of studies have been and are being done. There are several registers which log all the corneal grafts performed on a national level to facilitate this kind of research.

In Bulgaria the number of keratoplasties being done each year is comparatively small. This significantly hinders the ability for proper evaluation of the graft outcome if the study is based on the patients of a single corneal specialist, as has usually been the case. With this in mind, I set out to create a national corneal graft register.

At first, the structure and data gathering methods of already established keratoplasty registers was examined. A list of suggested parameters to be collected in the database was created and sent to corneal surgeons for suggestions and improvements. Based on the feedback received were created forms for reporting new keratoplasties and for patient follow-up. These were then presented to surgeons, who perform keratoplasty. Data transmission will initially be by emailing the completed forms for inclusion in a central database with a yearly follow-up.

Future plans allow for the creation of an online platform for information gathering and storage, which will allow for easier data entry and instant access of surgeons to their patients results. The operation of this corneal graft register will allow for better and more accurate statistical evaluation of factors related to the graft survival and hopefully improve keratoplasty outcomes.