

## **Streszczenie w języku angielskim**

The outbreak of the COVID-19 pandemic has challenged health care around the world to take immediate action to combat the rapid expansion of the new virus, leading to a strain on the health care system and the restructuring of hospital departments. In the first months of the pandemic, hospitals in Poland halted elective admissions, limited their activities to treat patients requiring immediate medical attention and those with cancer. In addition, a number of hospitals were converted to single-name hospitals - infectious diseases for the treatment of COVID-19 patients.

The aim of this study was to analyze the impact of the SARS-CoV-2 pandemic on the functioning of ophthalmology departments in terms of the course of ophthalmology specialty training and the profile of anti-glaucoma procedures performed. For this purpose, two studies were conducted: a survey study among ophthalmology residents in Poland who assessed the impact of the pandemic on their well-being and specialty training process, and a single-center retrospective study at the Department of Ophthalmology at the University Hospital in Białystok comparing surgical treatment of glaucoma patients before and during the pandemic.

A survey study of 124 residents conducted by using an online questionnaire showed that the pandemic had an overall negative impact on the implementation of the specialty program, research work and the acquisition of surgical skills by residents, especially those redirected to work on COVID-19 units. The organization of the new forms of virtual teaching introduced during the pandemic, their content value and usefulness in daily clinical practice were evaluated positively. There was a significant percentage of reported feelings of ongoing anxiety about the pandemic, depression and fear of virus transmission, as well as low awareness of the existence of mental support programs for medical personnel during the pandemic.

Residents who worked with COVID-19 patients expressed higher levels of anxiety at work. Considering the results of the survey, it is indicated to intensify and provide additional surgical training to residents delegated to COVID-19 wards during the pandemic and to introduce virtual surgical simulators to ophthalmology wards to improve practical skills. It would be beneficial to permanently introduce and improve virtual forms of teaching. It is also advisable to provide individualized mental health support to residents especially those delegated to COVID-19 wards.

A retrospective study of 306 patients who underwent surgery before the pandemic and 149 patients who underwent surgery during the pandemic showed a decrease in the number of glaucoma surgeries by half during the pandemic compared to a similar period before the pandemic, with a significant difference in the type of procedures performed between the two groups. In order to reduce the risk of spreading SARS-CoV-2, the profile of glaucoma surgeries changed towards short anti-glaucoma procedures such as TSCP and minimally invasive glaucoma surgeries.

In conclusion, the results of the present study may be useful to clinicians and members of ophthalmic societies for developing new standards and planning strategies for the surgical treatment of glaucoma patients, as well as indicating long-term solutions that, if introduced on a permanent basis in the future, could help to maintain the effectiveness of specialty training in ophthalmology.