

THE FUTURE OF PRECISE AND SAFE EYE LASER TREATMENT

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The actuality of the subjectThe history of the development of laser ophthalmic surgery dates back over 50 years since the American physicist T. Maiman created the first laser based on a ruby crystal back in 1960.

Since then, this remains a current topic in ophthalmology, and modern technologies are in continuous development. A new revolutionary stage in this field began in 2009, when for the first time a navigational system was proposed for diagnostic and therapeutic purposes - Navilas 577.

The purpose of the work - the practical assessment of the working possibilities of the Navilas 577 navigational laser system.

Material and methods - a retrospective analysis of laser coagulation procedures performed on an outpatient basis using the Navilas 577 was performed.

Results and conclusionsIt is a retinal laser system that brings a number of unique features and benefits thanks to its navigation technology. Here are some of its notable features: **High precision and reliability:** The Navilas 577 system offers precision and reliability by prepositioning and stabilizing the laser beam on the patient's retina, both for contact and non-contact treatment. **Increased speed:** Due to the extended field of view and automatic placement of the laser pattern, the Navilas 577 enables the treatment of the peripheral region faster and more efficiently than conventional lasers with pattern scanning. **Advanced comfort:** The system allows the comfortable application of the laser pattern, optionally under infrared light and without the use of a contact lens. **Digital Workflow Integration:** Navilas 577 facilitates import of external diagnostic images, digital reporting and DICOM integration. **Economic efficiency:** Saving time by fast laser application, improving patient cooperation and optimal use of team resources through digital guidance.