Editorial

Minimally invasive glaucoma surgery. Where we are and where we are going

Cirugía de glaucoma mínimamente invasiva (MIGS). Dónde estamos y hacia dónde caminamos

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In recent years, glaucoma surgery has gone through a spectacular revolution. The traditional surgery which hardly evolved since the mid-twentieth century has been superseded by the group of new devices which considerably increase the range of options for surgical approaches to glaucoma patients.

Overall, said devices have been given the name of “minimally invasive glaucoma surgery” or MIGS. All these devices pursue the goal of reducing intraocular pressure in glaucoma patients with the lowest possible rate of complications, overcoming those inherent to conventional surgery regardless of its association to the use of antimetabolites.

Within said group of new devices, some aim at deriving the aqueous humor through the trabecular mesh directly to Schlemm’s canal, whereas others derive the aqueous humor toward the suprachoroidal space. Both approaches achieve significant intraocular pressure reductions as well as the need for additional medical treatments. The effect of these approaches is now receiving the endorsement of long-term studies which confirm their efficacy and safety.

Recently, one of the first implants marketed in Europe has been given authorization by the FDA for use in the United States. This would clearly reinforce the quantity and quality of scientific evidences for this type of surgery.

Accordingly, new possibilities are unfolding before us which we should not ignore. These new surgery techniques involve a change in the paradigm of surgical glaucoma treatment and represent a return to the roots in order to reinforce the importance of the perfect knowledge of angular anatomy. This factor has possibly been forgotten in these times of spectacular technological innovations in the areas of imaging diagnostic systems for glaucoma.

Possibly, at this time we are only at the beginning of the search for more efficient and safer surgery techniques which can be transmitted to the coming generations of ophthalmologists who would have to care for a population with an increasingly longer life expectancy and in which the incidence of glaucoma will doubtlessly increase significantly. This transitional period should be similar to those which took place in other fields of medicine and even in other sub-specialties of ophthalmology in which the change toward minimally invasive surgery has already taken place. Let us hope that with these new surgery techniques, the surgical treatment of glaucoma will become a tool applied at earlier stages of the disease instead of being the last resort after going through all possible options and combinations of medical treatments when the functional alteration and the deterioration of quality of life of glaucoma patients has already been irreversibly damaged.1-4
REFERENCES


