Mitomycin C versus 5-FU in failing blebs needling
¿Mitomicina C o 5-FU en la manipulación con aguja de ampollas fracasadas?

Dear Editor,

Please allow me to express my congratulations to the team led by Dr. Esperanza Gutiérrez for the results obtained in the recently published article titled «Repermeabilization through revision with filtration bleb needling with late failure after glaucoma surgery» (1).

Although the results are obtained from a retrospective study, with the limitations this may entail, they achieve a high success rate in previously failed blebs, with a mean time from filtrating surgery to revision with 5-FU of 67.3 months, including one failed case 23 years after surgery.

In said study the authors explain, from a descriptive statistical viewpoint, the time elapsed from surgery to the bleb failure, which seems not to have significant relevance. In other papers, if said interval is shorter, it is considered as one of the factors which most contributes to the success of repermeabilization, to the extent of being included in the patient selection criteria.

Personally, I stopped utilizing 5-FU many years ago due to the epithelial complications, the subjective irritation it caused patients and the need for retreatment (2,3). In our personal experience, we obtained better results with Mitomycin C associated to needle manipulation in cases where it hadn’t been used intraop, thus reducing the risk of cadveric blebs (4).

However, in said article complications are less frequent and severe than those of other published series. Taking into account the seriousness which characterizes this glaucoma workgroup of the 12 de Octubre Hospital, this leads other ophthalmologists (including myself) to reconsider performing bleb revisions with 4-FU in late failures (1).

To end, I reiterate my gratitude to this group for continuing to work along the line which signifies a great contribution to those of us who daily endure the shockwaves of glaucoma surgery and its frequently unforeseen and difficult postops, adding that we all need more prospective dual arm studies with both anti-fibroblasts in order to assess long term results.

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REFERENCES


Reply

Dear Editor,

We are sincerely grateful to Dr. Carmen Cabarga del Nozal for her letter and would like to comment some points thereof.

Our work analyzes the possibilities of possibilities of recovering filtration in initially working blebs which suffer late failure. All the cases we presented are eyes with filtrating surgery performed over 6 months earlier (1). This is a completely different situation to that of other studies (2) which include just operated patients. I agree in that one of the keys of success for achieving a good filtration bleb is to obtain and maintain the passage of aqueous through it before conjunctival adhesions become affixed. In this regard, it is essential that the needle revision, associated to the anti-metabolite of choice, is carried out at an early stage, although in our experience if there is a large conjunctival congestion and inflammation, the needle manipulation
could even be counterproductive because it exacer-
bates the situation and enhance fibrosis. Therefore,
in such cases, we would prefer to control IOL with
medical treatment and defer the revision until the
inflammation abates. We believe that the selection
of patients based on the characteristics of the bleb is
the main factor for the success of this procedure,
which can be efficient even a long time after
surgery, which is the point we were trying to prove
in our research.

In what concerns the election of the anti-
metabolite, there is no doubt that the use of 5-flu-
oracyile (5-FU) is more laborious because it
requires more applications and therefore more
revisions. However, we prefer it on the basis of
our experience because it is the anti-metabolite
we utilize intraoperatively. Our interest lies in
maintaining the patient’s vision in the long term
and we are convinced that, even though mito-
mycin (MMC) achieves lower IOP values, its
complications are also bigger, thus compensating
the alleged inferiority of 5-FU, as proved in the
articles of the Moorfields Eye Hospital group
(3,4). In addition, epithelial toxicity can be mini-
mized by taking certain precautions such as
avoiding reflux when injecting, washing the ocu-
lar surface after injection and associating the fre-
cquent use of humidifying eye drops.

However, we recognize that MMC is demonstrat-
good results and low complication rates in sub-
conjunctival applications associated to needling
revision, as shown by Dr. Cabarga herself (5), and
we agree that a prospective study comparing both
anti-metabolites would be a great idea because it
would provide the evidence we need for taking the
adequate choice.

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REFERENCES

1. Perucho-Martínez S, Gutiérrez-Díaz E, Montero-Rodríguez M, Mencía-Gutiérrez E, Lago-Llinás MD. Reperme-
2. Li G, Kasner O. Review of consecutive phacotrabeculec-
tomies supplemented with early needle revision and anti-
3. Membrey WL, Poinoosawmy DP, Bunce C, Hitchings RA. Glaucoma surgery with or without adjunctive antiprolife-
ratives in normal tension glaucoma: 1 intraocular pressu-
4. Membrey WL, Bunce C, Poinoosawmy DP, Fitzke FW,
Hitchings RA. Glaucoma surgery with or without adjunctive antiproliferatives in normal tension glaucoma: 2
5. Gutiérrez-Ortiz C, Cabarga C, Teus MA. Prospective eva-
luation of preoperative factors associated with successful mitomycin C needling of failed filtration blebs. J Glauco-