

**Informed consent: Mitomycin-C and 5-Fluorouracil in  
Glaucoma Filtering Surgery**

Antimetabolite medications, originally developed for the treatment of various types of cancer, have also been found to be of value with certain types of glaucoma filtration operations. These agents, applied during or after the surgery, reduce the growth of scar tissue, a common cause of failure in glaucoma surgery. When antimetabolites are used with other medications that reduce inflammation, the success rate is greatly improved, especially in patients at high risk for excessive scarring. Definitive criteria for using or not using antimetabolites have yet to be established in glaucoma filtration surgery, although there is evolving consensus when these agents are of most value. Reasons to use these medications include surgery on previously operated eyes, failure of previously operated eyes, failure of previous glaucoma operations in the same or fellow eye, co-existing pre-operative inflammation (uveitis), glaucoma due to new blood vessel formation within the eye, combined glaucoma and cataract surgery, in patients of "relative youth", the more deeply pigmented races, an established need for very low postoperative pressures and unoperated eyes at risk for postoperative filter scarring.

Mitomycin-C and 5-Fluorouracil are the most commonly used antimetabolites in ophthalmology today; these medications are used in conjunction with other preoperative and postoperative medications designed to increase the success rate in glaucoma operations. In spite of these antimetabolites increasing the success rate in glaucoma surgery, most ophthalmologists, including glaucoma specialists, do not use antimetabolites in every glaucoma case because of problems caused by these medications. In addition to the usual complications of glaucoma surgery, the "antimetabolite" filter, especially when Mitomycin-C is used, may provide over-filtration, initially associated with a soft eye and blurring of vision, which, although usually transient, may become permanent.

The cornea, the transparent window in the front of the eye, may recover more slowly in operations in which the antimetabolites are used. As with any glaucoma operation in which "thinning" of the filtration tissues occur, there is a risk of lifelong infection or leaking.

Mitomycin-C is applied to the operative site at the time of surgery and 5-Fluorouracil is used both intraoperatively and postoperatively, may be applied as an injection. These medicines are adjusted in both dosage and duration of treatment in order to optimally slow the healing process. The decision to use these agents is based on the evaluation of the advantages and potential disadvantages in each individual case. Conversely, the decision not to use the antimetabolites may be valid because of the particular circumstance and risk factors involved.

I have read the above information and have discussed it with the undersigned and concur with the decision to:

Use the antimetabolites as may be found indicated in my operation.

Not use the antimetabolites in my operation.

X \_\_\_\_\_  
Patient Signature (or person authorized to sign)

x \_\_\_\_\_  
Date

X \_\_\_\_\_  
Physician Signature

x \_\_\_\_\_  
Date