When starting a patient on therapy for glaucoma, the ophthalmologist has three choices: medication, laser therapy, or surgery. Considering these in reverse order, the Collaborative Initial Glaucoma Treatment Study (CIGTS) showed that initial surgical therapy reduces IOP to a greater degree than initial medical therapy with no significant increase in side effects or negative impact on quality of life.\(^1\) The Glaucoma Laser Trial (GLT) showed that initial laser trabeculoplasty was at least as effective as initial medical therapy,\(^2\) although this study was conducted prior to the introduction of prostaglandin analogues. Most US ophthalmologists, however, choose medication as initial glaucoma therapy.

How do clinicians select which agent to use first? They consider the ease and frequency of administration, the side effect profile, and the potency of the various medications. Currently, prostaglandins are the most common choice, owing to their once-a-day administration, favorable side effect profile, and high potency. The importance of two other factors in the selection of glaucoma medication is growing: (1) the costs of the different agents and (2) which ones are covered by the various HMO plan formularies, Medicare Part D plan formularies, and state Medicaid formularies.

### Patients Without a Drug Plan

For patients who have no drug plan, cost may become the paramount issue. In my practice, most patients use more than one glaucoma drug. Currently, the cost of generic latanoprost at my hospital pharmacy is approximately $90, whereas that of the brand-name prostaglandins is around $140. In contrast, one can purchase generic timolol at one of the national “big box” store pharmacies for $4 and generic 0.2% brimonidine for about $20. When patients have a limited income and are paying cash, clinicians may decide that the advantage of a lower cost outweighs the drawbacks of slightly lower efficacy, a worse side effect profile, and a need for twice-a-day administration.

It is important to note that the price of drops varies among pharmacies. A given pharmacy may have the lowest price for one agent but the most expensive for others. Patients who are paying full price for glaucoma medications should be encouraged to shop around to find the best deal. Some pharmaceutical companies distribute coupons for their branded products that help lower the price, but clinicians must have these vouchers in hand and remember to give them to appropriate patients. Unfortunately, manufacturers seem to be cutting back on their “needy patient” programs to provide free medications. Those that remain increasingly seem to cover short periods of time and require extensive work by the clinician’s staff.

### Patients With HMO and Part D Formularies

A majority of these plans have a tiered system in which the copay for the drug varies with the tier. In general, most generic drugs carry the lowest copay. If the clinician wants a patient to use a brand-name agent, it will require a higher copay or may not be on the formulary. For example, when a patient has a conjunctival condition or a known allergy to a preservative, I have prescribed a preservative-free medication only to find that the drug plan does not allow it. After time-consuming requests for special waivers, my staff and...
I have been able to obtain authorization for these products in many but not all cases. The upshot is that the eye care provider may be unable to prescribe what he or she believes is the best agent for a patient, because the drug plan will not allow it.

Another problem with many of these formularies is that they will not permit the use of fixed-combination products such as Cosopt (Akorn), Combigan (Allergan), or Simbrinza (Alcon). Rather, they insist that clinicians prescribe the two component agents separately as generics. Although, theoretically, using the two agents separately should be equally as effective as using the fixed combination, experience has shown that a significant minority of patients experience a better pressure-lowering effect with the combined product.\(^3\) Whether these individuals are instilling the second drop too soon after the first and washing it away before it has been fully absorbed or whether they forget to instill the second drop sometimes is unknown. A second benefit of a fixed combination is that it reduces the patient’s exposure to the preservative.

**PATIENTS WITH MEDICAID**

In Illinois, where I practice, the aforementioned formulary problems are even worse with Medicaid, which is more restrictive and makes it far more difficult for me to obtain waivers. The result is poorer control of my Medicaid patients’ glaucoma and a greater need to proceed to laser or surgical therapy than might be the case if they received optimal medical therapy.

**CONCLUSION**

The cost of glaucoma medications and the limitations imposed by drug plan formularies significantly affect how eye care specialists are able to treat patients with glaucoma, sometimes to their detriment. If agents currently in phase 3 testing prove to be efficacious and become available in the United States, it remains to be seen whether drug plans will allow their use.

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