

Enhancing Glaucoma Patients' Adherence to Prescribed Medical Therapy

Tools to meet the challenge.

BY GAIL F. SCHWARTZ, MD

Patients' adherence to prescribed medical therapy for chronic diseases is poor, particularly when the disease is asymptomatic. The rate for glaucoma therapy averages approximately 60%,¹⁻⁷ with prominent cycling behavior resembling "white coat adherence."^{1-3,8,9} In this scenario, patients resume using medication shortly before an appointment, continue dosing shortly afterward, and then lapse until the next visit. Physicians are unable to detect which patients are not adherent,¹⁰ and it thus becomes difficult to sort out clinical efficacy versus lack of adherence.

Tsai et al noted 71 discrete obstacles to consistent eye drop use.¹¹ The Glaucoma Adherence and Persistency Study (GAPS)¹⁻³ evaluated a pharmacy claims database and physicians' charts, and it included interviews with patients and physicians. Ninety percent of patients reported using therapy as prescribed, yet claims records set that rate at 60% to 65% (see *The Key Points Related to Nonadherence*).

The difficulty of administering drops is also well documented from the GAPS as well as Hennessy et al¹² and Stone et al.¹³ For example, prematurely running out of a drug becomes a significant problem. Glaucoma suspects have also been shown to be less adherent than patients diagnosed with glaucoma.⁵⁻⁷

Improving adherence remains a challenge. Several studies have assessed various interventions such as education and reminders. None has had broad success.^{14,15} Pharmaceutical companies have introduced devices such as the Travatan Dosing Aid (Alcon), which have not universally influenced adherence rates.¹⁶⁻¹⁸

IDENTIFYING NONADHERENCE

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affects patients' answers. Open-ended questions and patient-centered interviews (ie, an "ask-tell-ask" strategy) are key.¹⁹⁻²¹ Initiating the discussion by stating, "Many patients have difficulty using drops," helps the patient to feel he or she is not alone and makes him or her more willing to admit difficulties.

There is a big difference between asking, "What difficulties are you having with your drops?" and "Are you having difficulties with your drops?" Learning patients' health beliefs is harder, but one technique is to ask them what they believe the drops will do for them. Patients frequently do not understand glaucoma and its treatment; identifying the misconceptions or holes in their knowledge and then addressing them can be effective. A study in which physician-patient interactions were videotaped showed successful and unsuccessful techniques for eliciting information from the patient.²¹ Physicians who spent most of the visit talking rather than asking questions were less effective at detecting nonadherence.

IMPROVING ADHERENCE

Staff Involvement

The office staff can improve patients' adherence through various techniques. For example, a designated

staff member can call patients rather than use postcard reminders for appointments.¹ The GAPS showed that phone calls significantly improved patients' keeping of appointments. The office staff can track patients who do not follow up and make a phone call or send a certified letter to those who do not reschedule.

Missed Doses

Clinicians can ask patients to name their drops or bottle cap colors and explain how they are using them. One method is to ask, "How often do you miss your drops?" rather than "Do you miss your drops?" Asking the former question a few times, with slight changes in wording, may elicit a different answer. For example, the provider could be as specific as asking, "How many times in a week (or month) do you miss your drops?" or "Do you have more difficulty remembering in the morning or evening?"

Administration

It is worthwhile to watch patients administer drops, such as artificial tears, in the office. This strategy allows the clinician or staff to provide helpful suggestions such as to make the head horizontal, hold the bottle perpendicularly, close the eyelids or use punctal occlusion, and wait at least 5 minutes between drops.

Written drop instructions have been shown to improve adherence.²² It is important to clarify what "twice a day" means. Otherwise, some patients may wait only a few hours between doses rather than about 12 hours.

Side Effects

Another technique is to ask about side effects (eg, redness, burning, stinging, blurred vision, or systemic side effects). If a patient is experiencing a side effect, then a change in medication may improve his or her adherence. If the problem and medication are clearly unrelated, then correcting this information becomes important. For example, a patient who complains of shortness of breath but is not using a β -blocker may blame any new medical problem on his or her eye drops. Clarifying what is and is not related as a side effect of a patient's specific medication can help him or her continue therapy.

Other methods by which physicians can improve patients' adherence include the choice of medication. Prostaglandin analogues generally have better adherence rates than other classes.^{5-7,23-26}

Affordability

Patients may be embarrassed to volunteer that they cannot afford a medication but may reveal this impor-

THE KEY POINTS RELATED TO NONADHERENCE

- relying on the doctor for all glaucoma-related information
- lack of concern regarding vision loss
- difficulty taking medication when away from home
- not keeping appointments (shown in several studies in addition to the Glaucoma Adherence and Persistency Study [GAPS]¹⁻⁴)
- "skipping" versus "forgetting"
- no complaints of burning or stinging
- cost
- not white
- dependence on samples
- concern about side effects
- not wanting others to notice his or her eyes, such as with hyperemia

1. Friedman DS, Quigley HQ, Gelb L, et al. Using pharmacy claims data to study adherence to glaucoma medications: methodology of the Glaucoma Adherence and Persistency Study (GAPS). *Invest Ophthalmol Vis Sci*. 2007;48:5052-5057.

2. Friedman DS, Nordstrom B, Mozaffari E, et al. Glaucoma management among individuals enrolled in a single comprehensive insurance plan. *Ophthalmology*. 2005;112:1500-1504.

3. Schwartz GF, Platt R, Reardon G, et al. Accounting for restart rates in evaluating persistence with ocular hypotensives. *Ophthalmology*. 2007;114:648-652.

4. Kosoko O, Quigley HA, Vitale S, et al. Risk factors for noncompliance with glaucoma follow-up visits in a residents' eye clinic. *Ophthalmology*. 1998;105:2105-2111.

tant information if asked. Switching a patient to a lower-cost alternative or exploring pharmaceutical company coupons or rebates can help. Also, patients without prescription coverage who have limited incomes may qualify for patient-assistance programs from pharmaceutical companies to receive medications for free. Clinicians and/or their staff should know what is on the "\$4 list" at some of the large chain pharmacies or where buying medications with cash is more reasonably priced.

Family

Providers can involve the patient's family members, who can remind the patient to use or refill a medication or instill the drop for the patient.

Simplification

A major point is to minimize the number of drops a patient must instill each day.^{27,28} The addition of a second medication often reduces adherence to both medications.

Weigh in on this topic now!



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Which of the following seems to be the number-one cause of nonadherence in your patient population?

- ☐ A. Problems instilling drops
- ☐ B. The cost of medication
- ☐ C. Side effects
- ☐ D. Forgetfulness or confusion

Routine

A final strategy is to help patients fit medication into their daily routine by associating it with activities they never miss, whether on a weekday or during a weekend. Examples include

- placing medication bottles by the coffee pot or toothbrush
- keeping an extra bottle at work or at the home of a significant other
- putting the bottle on the night table
- setting a cell phone alarm
- associating dosing with daily activities such as taking a systemic medication or at dinnertime
- keeping the bottle where the patient puts down his/her watch or jewelry to associate taking at the same time

CONCLUSION

Know when it is time to recommend laser trabeculectomy or surgery. Repeated office visits at which it is apparent that the patient either is not using topical medication or is not instilling eye drops correctly show that another intervention is needed. Patients can experience glaucomatous progression under a doctor's watch if lack of adherence is an ongoing problem. Taking adherence out of the equation can be a major factor in achieving appropriate IOP control.

Adherence is multifactorial, and no single intervention or set of interventions is universally successful. Clinicians must ask questions and listen to their patients' answers. How to direct treatment becomes much clearer once the cause of a patient's nonadherence is identified. ■

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