
COMPLIANCE -THE HIDDEN CHALLENGE OF GLAUCOMA MANAGEMENT

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Glaucoma is a chronic condition requiring in the majority of cases, life long topical therapy. Patient compliance is an important factor in controlling glaucoma. The problem is especially critical for eye doctors who manage patients with glaucoma, because the nature of this particular disease encourages non-compliance.

Most patients with glaucoma and all glaucoma suspects are asymptomatic. However, even patients who are symptomatic with vision loss don't experience a period of decreased vision when they don't take their eye drops. Therefore, glaucoma is unlike arthritis or other painful conditions in which noncompliance with medication results in pain. Conversely, compliance isn't rewarded, except perhaps with twice-yearly words of encouragement from a physician.

Compliance may be defined as the degree to which patients adhere to their doctor's advice. Non-compliance is the intentional or accidental failure to follow a doctor's directions in the self administration of any medication. It encompasses a spectrum from occasional forgetfulness to never following the recommended schedule.

IMPORTANCE OF NON- COMPLIANCE

Over 10% of visual loss from glaucoma may be caused by non-compliance. If a patient is not compliant with his medication, the physician might mistake the noncompliance for a lack of efficiency, potentially resulting in additional medication or unnecessary surgery for the patient.

If the compliance is variable and the patient only uses the drops for a few days before his visit to the doctor,

then during check up intra ocular pressure will be well controlled, but glaucoma advances. The doctor will be thinking of atypical normal tension glaucoma.

FORMS OF NON-COMPLIANCE

Failure to take medication is the most important form of noncompliance. Patients can miss doses of medications, discontinue prematurely or are unable to get the drop into the eyes due to physical disabilities.

Improper dose timing

Because patients are not aware of the duration of action of their medication and instill drops when it is most convenient for them, based on their life style, there may be large stretches of time when they are undertreated. Moreover patients may not give sufficient gap between two different medications, so that second drug may wash the first drug from conjunctival cul-de sac.

Excessive use of medication

Seen in patients who adopt the "more is better" strategy.

Taking the medication for the wrong reason

Patients may use a previously purchased bottle of astringent or antibiotic to treat their glaucoma before obtaining their next glaucoma prescription.

REASONS FOR NONCOMPLIANCE

Lack of understanding of the disease. Patients may not comprehend the severity of the disease. They need

to be told that the medication they are taking reduces eye pressure to avoid loss of peripheral vision, and that just because they see well does not mean that their disease is under control.

Benefits of glaucoma treatment not apparent

Treatment of many diseases is associated with measurable improvement by a patient. For example, a patient with an infection who is treated with an antibiotic often knows within hours after initial treatment that there is some improvement. In other words, it may be clear very soon to the patient that the infection is being treated successfully and that he is better. As a result, he is highly motivated to continue the treatment recommended by their doctor until it has been completed.

In contrast, an important goal of glaucoma treatment is to prevent further vision loss. Most of the time, a treated glaucoma patient cannot tell whether or not they have been treated successfully. Even if treatment is effective, their vision is most often not improved

Cost

Cost can be a major factor in patient non-compliance. An open discussion with the patients about the cost of medications is important so that they can be made aware of the costs.

Side effects

Most common side effects are stinging, redness and bitter taste. Dry eye patients who experience symptoms before glaucoma therapy may notice an exacerbation of symptoms once glaucoma drops are added. These effects, when combined with the absence of any observable benefit, may discourage patients from complying.

Frequency of instillation

This may also have an impact on compliance.

Prostaglandins (administered once daily) show better compliance than topical beta blockers, carbonic anhydrase inhibitors and alpha agonists (administered twice daily).

Physical difficulty in administering drops

Old age, poor visual acuity, forgetfulness, tremor, Parkinsonism are all hindrance to compliance.

Patient's social support system

Relatives and friends can help in compliance by providing transportation to appointments, remind patients to take medications and instill drops.

Patient-physician relationship

Compliance is improved if the patient is satisfied with the doctor.

DETECTION OF NONCOMPLIANCE

The most common techniques for detecting non-compliance are:

Patient interview

Patient interview is probably the most practical method for assessing compliance although it is not always reliable.

Clinical outcome

Monitoring clinical results, both objectively and subjectively, is probably the best way to detect non-compliance. Some patients may only take the medications on the day of the doctor's visit. If the IOP is at or below the desired target pressure, yet progression of cupping or field defects are noted, poor compliance may be the cause.

Calculation of number of bottles used per month.

INCREASING COMPLIANCE

Education is perhaps the most important single means for improving compliance. A patient who is educated about the nature of glaucoma and its treatment is most likely to be a better patient, and correctly use

their eye drops. The patient should understand that glaucoma is largely asymptomatic and that the benefits of treatment are not appreciated most of the time.

The initial office visit is important from the point of view of compliance. The doctor must impress on the patient the severity of glaucoma and the mechanism of the disease in a firm, but caring way. He may use visual aids to show a sequence of increasingly cupped optic nerves with corresponding visual field loss. A discussion on how the treatment prevents such loss by lowering the pressure should also be undertaken, with emphasis that the patient must be measured by the doctor, but will not feel lowered eye pressure.

It may also be useful to involve family members in this discussion whenever possible. Family members should be encouraged to sit in during the examination, as well as during the final consultation, so that they understand the patient's condition and become involved in the patient's care from the outset, which can be helpful later in the treatment phase.

Once a drug is selected, possible adverse ocular and systemic side effects should be discussed. If the patient accidentally forgets a dosage, he should put a drop in as soon as he remembers and then simply get back on the original schedule.

A simple schedule for administering the eye drops

is also useful. Least number of medications and lowest number of daily doses should be prescribed for desired therapeutic effect.

Reducing side effects from eye drops is important for their safe use and can improve compliance.

The patient should learn how to use his medications correctly. He should know how to gently close the eyelids and press the lacrimal sac with index finger for at least two minutes following eye drop administration. These simple maneuvers will increase the amount of drug that is absorbed into the eye and considerably reduce the amount that is absorbed undesirably into the blood.

When using more than one eye drop medication at a certain time, it is necessary to wait at least five minutes before using different drops. This allows the first eye drop to be absorbed into the eye before the second eye drop is given.

CONCLUSION

Even though cure in glaucoma is not yet within our reach, the aim of treatment is to preserve the sight and to maintain the quality of life. One of the most difficult challenges in treating glaucoma is ensuring patient compliance with medication. The more active a role we play in our patients' management, the greater the success in treating this chronic and potentially sight-threatening disease.

