

SHANTANU NETRALAYA

Eye Hospital • Varanasi

DIABETIC RETINOPATHY

A Simple Patient Guide to Awareness, Testing & Treatment

The most important message

Diabetic retinopathy can damage vision silently. You may have serious retinal changes even when your vision feels normal. Regular retinal check-ups can detect problems early, when treatment can often prevent further vision loss.

Prepared for patients and families in Varanasi and Purvanchal. Use this guide to understand what diabetic retinopathy is, what tests may be advised, and why different patients may need different treatments.

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Patient education guide • Not a substitute for an individual eye examination

1. What is diabetic retinopathy?

Diabetic retinopathy is damage to the small blood vessels of the retina—the light-sensitive tissue at the back of the eye. Long-standing or poorly controlled diabetes can make these blood vessels leak, close off, or grow abnormal new vessels.

Why can it be dangerous?

- It can start without symptoms. Early disease may not cause pain or noticeable blurring.
- As disease progresses, there may be retinal swelling, bleeding, abnormal blood-vessel growth, or scar tissue.
- Advanced disease can cause severe and sometimes permanent vision loss.
- Treatment is often most useful when the problem is detected before major damage occurs.

Do not wait for blurred vision

A common mistake is to think: “My vision is clear, so my retina must be fine.” Unfortunately, diabetic retinopathy can be present before you notice any change in vision.

Who is at higher risk?

- Longer duration of diabetes
- High blood sugar / high HbA1c
- High blood pressure or cholesterol
- Kidney disease and other diabetes-related complications
- Pregnancy in a person with diabetes
- Previous diabetic retinopathy

Protecting the eyes starts with protecting overall health.

2. What symptoms should I watch for?

Many people have no symptoms in the early stages. Later, symptoms can include:

- Blurred or fluctuating vision
- Difficulty reading or seeing fine details
- New spots, floaters, cobwebs or dark shapes
- Dark or empty areas in the vision
- Sudden drop in vision
- Difficulty seeing at night or changes in contrast

URGENT: seek prompt eye care

Sudden vision loss, a sudden shower of new floaters, flashes of light, or a curtain/shadow over the vision can indicate a serious retinal problem and should not be ignored.

3. How is diabetic retinopathy diagnosed?

Your retina specialist may use one or more of the following tests. You do not necessarily need every test.

Test	Why it may be done
Dilated retinal examination	Checks the retina and blood vessels directly.
Retinal photography	Documents the retina and helps compare changes over time.
OCT scan	Creates detailed cross-sectional images and detects retinal swelling or fluid, especially near the macula.
Fluorescein angiography	May be advised when the doctor needs more information about leakage or abnormal/blocked retinal blood vessels.

Important: The recommended follow-up interval depends on the stage of retinopathy, macular involvement, diabetes control and your doctor's assessment. People with diabetes should have regular comprehensive eye examinations; many guidelines recommend at least yearly screening when appropriate, with more frequent review when retinopathy is present.

4. Treatment options — not everyone needs the same treatment

Treatment depends on what is happening in the retina. Some patients only need observation and regular monitoring. Others may need injections, laser, surgery, or a combination.

A. Observation & monitoring

Early diabetic retinopathy may not require an immediate procedure. Regular retinal examinations are important because the condition can progress.

B. Anti-VEGF injections

These medicines reduce the effect of VEGF, a signal that can cause abnormal blood-vessel growth and leakage. They are commonly used for diabetic macular edema and may also be used in proliferative disease in selected situations. Several injections may be needed, especially at the beginning.

C. Steroid treatment

Steroid medicines may be considered in selected cases of diabetic macular edema. They can be useful in some patients, but they may increase the risk of cataract and raised eye pressure, so monitoring is important.

D. Retinal laser

Laser may be used to treat leaking areas in selected cases or to reduce the risk from abnormal new blood vessels in advanced diabetic retinopathy. Laser does not mean that the retina is being “burned away”; it is a controlled medical treatment designed to reduce future damage.

E. Vitrectomy surgery

If there is severe bleeding inside the eye, significant scar tissue, or traction on the retina, vitrectomy surgery may be advised. The surgeon removes the vitreous gel and treats the retinal problem as required.

A very important point about injections

An injection is not automatically required just because a person has diabetic retinopathy. The decision depends on the retina findings—especially whether there is macular swelling, abnormal new vessels, bleeding, or other vision-threatening disease.

5. Understanding eye injections

Patients often feel worried when they hear “injection in the eye.” Modern intravitreal injections are performed using numbing medicine and sterile precautions. The needle is very small, and the procedure is usually brief.

Why are injections given?

- To reduce fluid/swelling in the retina (diabetic macular edema).
- To control abnormal blood-vessel growth in selected cases of proliferative diabetic retinopathy.
- To help protect or improve vision when the retinal findings indicate that treatment is needed.

Will I need only one injection?

Not necessarily. Some patients need a series of injections. The number and interval are individualized based on vision, OCT findings and retinal activity. Do not stop treatment on your own simply because the eye feels better.

After an injection

- Mild irritation, redness or a few floaters can occur for a short time.
- If you develop increasing pain, worsening vision, marked redness, or significant light sensitivity after an injection, contact your eye doctor urgently.

Do not miss follow-up appointments

For some retinal conditions, treatment works only when injections and monitoring are continued according to the treatment plan. Missing appointments can allow disease activity to return.

6. What about laser treatment?

Laser is particularly important in some forms of advanced diabetic retinopathy. A common treatment is panretinal photocoagulation (PRP), which treats areas of the peripheral retina to reduce the drive for abnormal blood-vessel growth.

Laser can sometimes affect peripheral, night or colour vision. Your doctor will balance these risks against the risk of untreated proliferative disease.

7. When is surgery needed?

Most people with diabetic retinopathy do not need surgery. Vitrectomy is considered when the disease has become complicated—for example, when there is significant bleeding into the vitreous, severe scar tissue, or traction affecting the retina.

The aim of surgery

- Remove blood or cloudy vitreous that is blocking vision.
- Remove or release scar tissue pulling on the retina when necessary.
- Allow the surgeon to treat retinal breaks or perform laser treatment when required.
- Stabilize the retina in selected advanced cases.

8. What can I do every day to protect my eyes?

- Control blood sugar: follow the diabetes treatment plan prescribed by your physician.
- Know your HbA1c: your doctor can set an individualized target for you.
- Control blood pressure and cholesterol.
- Do not smoke.
- Take medicines regularly unless your treating doctor changes them.
- Keep your eye appointments even if your vision is normal.
- Bring your diabetes reports and medication list to eye visits when possible.

Remember

Good diabetes control reduces risk, but it does not replace retinal screening. A person with well-controlled diabetes can still develop diabetic retinopathy.

9. A simple checklist for patients in Varanasi & Purvanchal

If you have diabetes, keep this checklist with your medical records:

☐	I know my latest HbA1c result.
☐	My blood pressure and cholesterol are being monitored.
☐	I have had a retinal examination as advised by my eye doctor.
☐	I know whether diabetic retinopathy is present and what stage it is.
☐	I know whether the macula is swollen (diabetic macular edema).
☐	If treatment is advised, I understand why it is needed.
☐	I know my next follow-up date.

Questions to ask your retina specialist

- Do I have diabetic retinopathy? If yes, what stage?
- Is there swelling in the macula?
- Do I need treatment now, or only monitoring?
- Why are you recommending injection, laser or surgery?
- How many visits or treatments might I need?
- What warning symptoms should make me contact the hospital immediately?

Your vision is worth protecting

Diabetic eye disease is not something to fear—but it is something to take seriously. Early detection, appropriate treatment and regular follow-up can make a major difference.

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Varanasi • Retina & Comprehensive Eye Care

Patient education material • Please discuss your individual diagnosis and treatment with your ophthalmologist.

Medical references

This guide is written in simple patient-friendly language and is based on established patient-education material and clinical references. Treatment decisions must always be individualized by the treating ophthalmologist.

Key sources

1. National Eye Institute (NEI), National Institutes of Health — Diabetic Retinopathy: overview, screening, prevention and treatment.
2. National Eye Institute (NEI) — Injections to Treat Eye Conditions; anti-VEGF and steroid treatment information.
3. National Eye Institute (NEI) — Laser Treatment for Diabetic Retinopathy.
4. National Eye Institute (NEI) — Vitrectomy.
5. American Academy of Ophthalmology EyeWiki — Diabetic Retinopathy management overview.

Important disclaimer: This booklet is for general education. It does not diagnose diabetic retinopathy, determine treatment, or replace a comprehensive eye examination. The appropriate treatment may differ between patients depending on retinal findings, vision, OCT/angiography findings, systemic health and previous treatment.