Interferon and Its Effect on the Retina

What is interferon?
Interferons are proteins found in your body. Your body's immune system makes them. Interferon medicines work by boosting your immune system. They fight things like viruses, bacteria and cancer.

What diseases can interferon treat?
Interferon is commonly used to treat hepatitis C. Hepatitis C is a disease of the liver. It is caused by a virus.

Interferon can also treat many other diseases, including:

- hepatitis B
- human papillomavirus (HPV) health problems
- multiple sclerosis (MS)
- melanoma
- AIDS-related Kaposi’s sarcoma
- certain forms of leukemia

How can interferon affect the retina?
Interferon medicine can cause retinopathy. Retinopathy is a disease of the retina (the layer of light sensitive tissue lining the back of the eye) that can lead to vision loss. In most cases, retinopathy due to interferon medicine is mild and reversible. However, retinopathy can lead to vision loss.

Because of the potential for retinopathy, an evaluation by an ophthalmologist is recommended at the beginning of interferon therapy. Your ophthalmologist will let you know when you need to return for another exam. He or she will use a device called an ophthalmoscope to look for early signs of retina damage. Tell your regular doctor or your ophthalmologist immediately if you notice any changes to your vision.

Symptoms of damage due to interferon include:

- new floaters in your vision
- blurry vision
- dark spots or empty areas in your vision
Do not stop taking your interferon medicine. Discuss this decision with your doctor.

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How is retinopathy diagnosed and treated?

Your ophthalmologist will examine your eyes. To look for vision problems and retinopathy, he or she will:

- test your vison
- examine the front of your eyes (slit-lamp exam)
- widen your pupils with drops to examine the back of your eye

Your ophthalmologist will work with you and your doctor if you have retinopathy. You can adjust your treatment plan together if needed. This may reverse your retinopathy.

If your retinopathy needs treatment, it usually is treated with medication.

**Medicine.** One type of medicine is called “anti-VEGF” medication. This helps to reduce swelling. This drug is given by injections (shots) in the eye. Steroid medicine is another option to reduce swelling. This is also given as injections in the eye. Your ophthalmologist will recommend how many injections you will need over time.

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Summary

Interferon medicines work by boosting your immune system. They fight things like viruses, bacteria and cancer. Interferon is used to treat hepatitis C and other diseases.

Interferon medicine can cause retinopathy. Retinopathy is a disease of the retina that can lead to vision loss. In most cases, retinopathy due to interferon medicine is mild and reversible. However, retinopathy can lead to vision loss. Because of this, you need to see an ophthalmologist while you take interferon. He or she will examine you and look for early signs of retinopathy.

Symptoms of damage due to interferon include:

- new floaters in your vision
- blurry vision
- dark spots or empty areas in your vision

If you have retinopathy, your ophthalmologist will work with you and your doctor. You can adjust your treatment plan together if needed.
If your retinopathy needs treatment, it will usually be treated with medication that is given by injection.

If you have any questions about your vision, speak with your ophthalmologist. He or she is committed to protecting your sight.

Get more information about eye health from EyeSmart—provided by the American Academy of Ophthalmology—aa.o.org/eyesmart.