

# Macular Degeneration: The Inside Story

## Part #3

Ruth's retina specialist told her about three available **laser treatments** that are used to treat new vessels. He explained that they were usually painless. He emphasized that their goal was to reduce the risk of further vision loss, not to improve her vision. He also explained that the treatments sometimes work but sometimes fail.

One treatment, called **laser photocoagulation**, closes the leaking vessel with an intense, finely-focused laser beam. It is used when new vessels are located away from the center of the macula.



The intense laser beam causes a **blind spot** in the treatment area, but this is a small price to pay for preventing scarring that could destroy the entire macula.

A second treatment is **photodynamic therapy (PDT)**. Verteporfin is a dye currently used for PDT. After it is injected into a patient's vein, it collects in the new vessels growing in the macula. A relatively dim laser beam is then shined onto the area of new vessels for a minute or so.

This laser light produces chemical reactions in the new vessels that stop their growth. **The procedure doesn't destroy the overlying retina**, so it can be used to treat new vessels growing in the very center of the macula.

At the time of Ruth's appointment, **transpupillary thermotherapy (TTT)**, was another laser treatment under investigation. This therapy involves treating the retina with a one-minute exposure to an infrared laser. Power density is low, **no drug injections are required**, and the treatment has been useful for patients with occult, or poorly defined, new vessels.

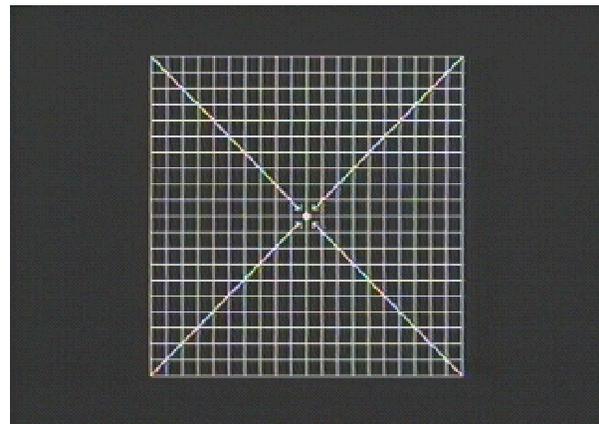
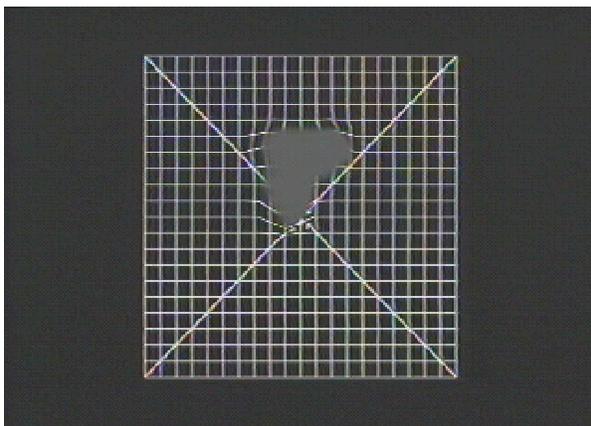
The leaking vessels in Ruth's eye were well-defined and located in the very center of her macula. The doctor recommended photodynamic therapy, explaining that the treatment usually needs to be repeated as new vessels recur. The treatment was performed after Ruth's informed consent, and, within an hour, Ruth was on her way home, **with her skin covered** to protect her from the summer sun until the photodynamic dye left her system.



Ruth maintains a positive attitude about her condition. She also knows how important it is for her to check her vision regularly.

To do this, she uses an **Amsler grid**, which she has posted on her refrigerator. This simple eye test helps her tell when changes occur in her vision, such as distortion or dark areas.

Gazing at the center of the grid with her right eye, she sees reasonably straight lines.



When she looks at the grid with her left eye, however, there are crooked and missing lines.

Fortunately, the vision in her left eye has not worsened since its treatment, and--even with her other eye closed--she can still recognize faces.



Ruth probably would be seeing a different picture without therapy. New vessels probably would have caused macular scarring in her left eye, permanently destroying her central vision.

A few years ago, that scenario would have been unavoidable. But, thanks to new research and treatments, Ruth's eyes retain reasonably good vision. One eye compensates for visual defects in the other, providing an almost normal view of the world.



To keep her eyes as healthy as possible, Ruth follows several simple guidelines:

- **Her diet is rich in leafy green vegetables.**
- **She takes the recommended dosages of antioxidant vitamins and zinc,**
- **She doesn't smoke tobacco.**
- **She protects her eyes in bright outdoor environments**

**by wearing a brimmed hat and sunglasses.**

- **She uses an Amsler grid to check the vision in each of her eyes separately, and**
- **She will contact her doctor, should she notice a decline in her vision.**

Ann is John's daughter. She doesn't have macular degeneration; but, because she is also fair-skinned and blue-eyed, she knows she's at some risk of developing it.



By bringing these people together, Ann is giving them a chance to share their knowledge and experiences. They know that they can deal with even the worst situations through **support, patience, practice, and low vision assistance.**

Understanding and treatment of macular degeneration is progressing slowly, but steadily. Meanwhile, education helps people to become more discriminating consumers of therapies and services. It also keeps them aware of progress in the continuing battle to slow macular degeneration and improve the quality of life of those who have it.

**End**

Information and support is available on the Internet to macular degeneration patients and their families at:

[www.mdsupport.org](http://www.mdsupport.org)

To order the video version of "Macular Degeneration: The Inside Story," visit:

[www.mdsupport.org/videos.html](http://www.mdsupport.org/videos.html)

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