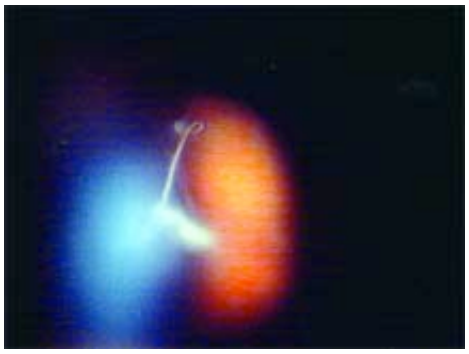
COVER FEATURE

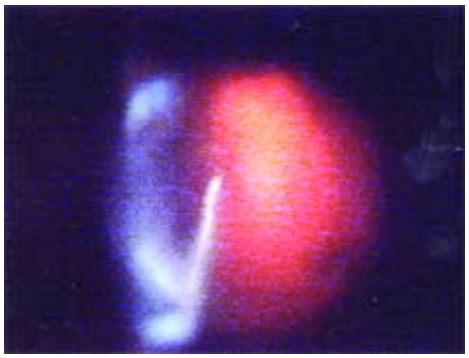
Some patients willing to take risks to rid themselves of floaters

by Maxine Lipner Senior Contributing Editor

Floaters can be maddening for some patients — but what is a practitioner to do?



Large central stationary floater, 38-year-old male, and no posterior vitreous detachment (PVD).



Partial photo description, 325 pulses, 4.3 mJ, fundamental mode. Source: Scott L. Geller, M.D.

What would you do? A practitioner's 54-year-old refractive patient came to him to get rid of her terrible floaters. Against his advice, the patient went to a vitreoretinal surgeon, who performed a pars plana vitrectomy.

The patient was free of the floaters, and, as before, had 20/20 vision. She was ecstatic until six months later, when she returned to the original practitioner with a rather dense posterior subcapsular cataract, which he removed.

Although the practitioner thinks that YAG laser treatment of posterior vitreous detachment (PVD) floaters is at least better than pars plana vitrectomy, he worries about the efficacy and wonders what other practitioners have experienced with the two procedures.

Richard J. Mackool, M.D., director, Mackool Eye Institute, senior attending surgeon, New York Eye and Ear Institute, New York, performed a number of YAG procedures on floaters about 15 years ago.

"I found that if you're lucky, you get two or three little floaters when you YAG one big one, and the patient may like this," Dr. Mackool said. "If unlucky, the floaters rapidly return to each other, apparently because vitreous strands still interconnect them, and the former may contract with time. All in all, the success rate isn't great, but neither is

the risk."

When it comes to performing vitrectomies on phakic eyes, Dr. Mackool has found that there are ways to minimize risks.

"I have done a few thousand pars plana vitrectomies, and I found that it is the delivery of infusion fluid via a cannula through the pars plana that is most associated with cataract development/ progression (both intra-operatively and post-operatively)," said Dr. Mackool. "When the infusion is delivered through an infusion/fiberoptic light source and the flow of the BSS [balanced salt solution] is far away from the lens, cataract development is really rare both during and after the procedure."

With this technique, however, because the infusion capacity of the fiberoptic/infusion probe is relatively low, the vitrectomy must proceed a bit more slowly, he said.

Glenn L. Stoller, M.D., Ophthalmic Consultants of Long Island, New York, takes a conservative approach in such cases.

"I generally tell people to try and live with it," said Dr. Stoller of floaters. "If they can't, and if it's absolutely interfering with their ability to function in life or function at work, I'll offer them vitrectomy and explain to them the risks."

While most of the time vitrectomies go well, patients can end up with retinal detachments, cataracts, or even endophthalmitis.

"For those patients that are bothered enough by their floaters that they are willing to accept the risks associated with vitrectomy, I will offer it to them," Dr. Stoller said. "Those that have had the surgery in general have experienced excellent relief of their symptoms."

Dr. Stoller also stated that he has not found the YAG procedure to be very effective.

By contrast, Scott L. Geller, M.D., Ft. Myers, Fla., favors the YAG approach. Dr. Geller said he has successfully treated thousands of patients since 1986 with the laser.

"The most easily treated patients and those with the most dramatic results are those with large fibrillar degenerative clumps in the mid-vitreous," Dr. Geller said. "Very often, these patients have masses that obscure their vision to a very large degree."

In some cases, fairly stationary clumps in the mid-vitreous can actually reduce visual acuity.

"I have cases where we've documented visual acuity decrease to 20/60 or 20/70, because these opacities just stay in a minimally mobile central area, and we get them back to their normal acuity," he said. "Residual floaters may

still be present, but at least the patient can see."
Dr. Geller also finds that the YAG works well for patients that have a large mass that is intermittently in front of their visual axis.
"Those things can be photo disrupted, the supporting strands can be cut, and they drop out of the visual axis and basically improve the patient's vision," Dr. Geller said. "In those types of cases, if the mass is not too large, I can usually break it up so it's dissipated and hardly even noticed."
Other patients that he finds can benefit include those that have posterior vitreous detachments with Weiss rings.
"These can appear as anything from a few minute specks, which are of no consequence to a very large hyaline mass that intermittently floats in front of the fovea, to a hyaline sheet that runs along the posterior hyaloid and obscures vision," Dr. Geller said. "I have documented cases of patients with dramatic improvement of acuity, say from 20/50 or 20/60 down to 20/25 or 20/30, just by opening up the posterior hyaloid so they get a clear visual axis."
Dr. Geller estimates that the probability of improvement for patients with Weiss rings following YAG is about 95% and for dense vitreous masses, 85% probability of improvement, to a greater or lesser degree. Unlike vitrectomy, the complication rate is very low. Dr. Geller has seen only one case of retinal detachment among the thousands of floater cases he has handled.
"The commonly held belief that the laser poses a high risk of retinal detachment or an increased number of perceived floaters is absolutely incorrect," Dr. Geller said. "I know this based on my experience over the past 18 years with more than 4,000 cases. The biases of the ophthalmic community are based on theory, not fact.
"Probably 99% of ophthalmologists have never examined a patient who has had laser treatment of floaters, or have seen it done before," he said. h

***Editors' note**: Drs. Geller, Mackool, and Stoller have no financial interests related to their comments.*

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