

or were told so long ago that they have forgotten.

Geller agrees that his findings do not explicitly contradict the opinion of Judge Tauro. "The study doesn't say whether people are competent or incompetent. It simply asks, what do people know?" Geller says. "And they don't know much." Geller emphasizes, however, that even though up to 45 percent of the patients might be interpreted as having a partial understanding of their medication, there remains the majority of the patients who understand nothing. With that group, he insists, it is clearly a matter of incompetence. These patients, he points out, are incompetent not only to refuse but also to consent to medication, which means that for most — those without guardians — the drugs are being prescribed without the patient's informed consent. Patients are declared incompetent only for refusing drugs, Geller concludes — never for complying.

—W. Herbert

## Rally in U. S. for Soviet chemist

Edward D. Lozansky was married last week in the U.S. Capitol building, but his bride, Tatyana, was in the Soviet Union.

Lozansky, who teaches mathematics and physics at American and George Mason Universities in the Washington, D.C. area, left the Soviet Union in 1976. He had been fired from his teaching position at the Moscow Military Academy apparently for citing dissident scientist Andrei D. Sakharov (SN: 12/6/80, p. 356; 2/2/80, p. 67) in his lecture classes. At that time, Lozansky, a Jew, was married to Tatyana — a chemist and daughter of a three star general who is chief of staff of Soviet civil defense. The couple was told that Edward would be allowed to emigrate and that Tatyana and their daughter Tanya later would be allowed to join him if they signed divorce papers. Tatyana and Tanya have yet to be granted exit visas.

Last week's re-marriage by proxy was conducted to call attention to the plight of the Lozanskys. In addition, Tatyana — along with three other Soviet citizens who are married to persons living in the United States and who repeatedly have been denied exit visas — last week began a hunger strike scheduled to last until the participants are released from their country.

Also, Sen. Robert Dole (R-Kan.) and Cong. Jack Kemp (R-N.Y.) have introduced concurrent resolutions to Congress that urge the Soviet Union government "to act immediately to facilitate the emigration" of Tatyana, her daughter and the three other persons separated from their spouses. The resolution goes on to state that Congress "also sends its heartfelt sympathy to the families of the countless other[s]... who have attempted to obtain and been denied exit visas." □

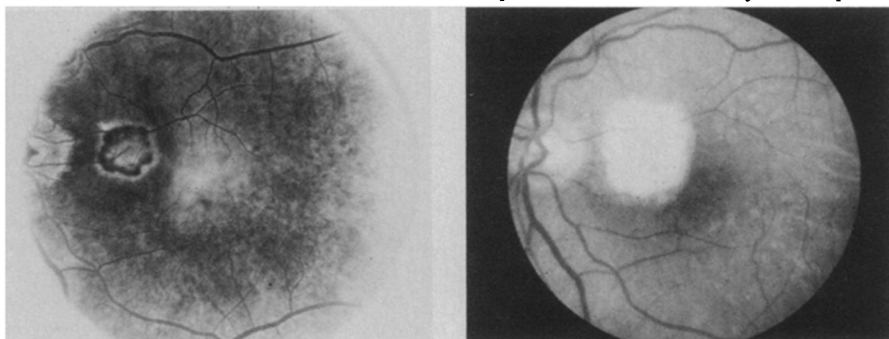
## Laser therapy: Light against blindness

Six years ago, a National Eye Institute trial showed that lasers could prevent a major cause of blindness among Americans — that caused by diabetic retinopathy (SN: 4/10/76, p. 232). As a result, lasers have become the standard treatment for this form of blindness. Now another NEI trial has found that lasers can prevent another leading cause of blindness among Americans as well — that triggered by a disease called senile macular degeneration. The preliminary results from the trial were presented last week at a NEI press conference held on the National Institutes of Health campus in Bethesda, Md., and will be published in the June ARCHIVES OF OPHTHALMOLOGY.

Stuart Lee Fine, associate professor of ophthalmology at the Johns Hopkins Medical Institutions in Baltimore and chair-

The macula provides central vision, whereas other areas of the retina provide peripheral vision. Thus, if blood enters the macula, central vision is destroyed.

To qualify for entry into the study, which began in 1978, SMD patients had to have abnormal blood vessels in their eyes that had not yet reached the macula. Patients were randomized to receive either laser treatment or to serve as controls. As of January 31, 1982, 41 of the 244 patients had been followed 18 months or longer, and 105 for at least a year. Preliminary results compiled from all the treatment centers show that the rates of visual loss in the treatment and control groups were not significantly different at six months after patients entered the trial. However, by 18 months after patient entry into the study, 60 percent of untreated eyes compared



Eye with senile macular degeneration before (left) and after (right) treatment.

man of the NEI study, said, "The treatment benefit was so striking that recruitment of new patients was terminated almost two years earlier than anticipated, and all eligible patients are being offered treatment."

Carl Kupfer, director of the NEI, added, "The significance of these findings is so great that, as soon as I learned about them, I asked that they be communicated to the new Director of the National Institutes of Health, Dr. James Wyngaarden." Wyngaarden stated that "this study's results may save more than a million Americans from severe visual loss over the next decade and save as much as \$2.5 billion in tax monies as well."

Lasers prevent diabetic retinopathy blindness by sealing off or destroying blood vessels in the eye before they leak blood into the retina or vitreous humor (gel that fills the center of the eye) and thus destroy vision. The current NEI trial was launched at Johns Hopkins and 11 other medical centers to see whether lasers could also destroy abnormal blood vessels that form in the eyes of 5 to 20 percent of SMD patients. (The other 80 to 95 percent have what is known as "dry" SMD, in which loss of vision is slow and the ability to read is retained.) If unchecked, the blood vessel leakage in this neovascular form of the disease occurs in a particularly critical area of the retina, the macula.

with just 25 percent of treated eyes had lost major vision, a highly significant statistical difference.

About 35 percent of the treated eyes were saved from serious visual loss by laser treatment, according to the researchers.

The NEI is now eager to see lasers become a standard preventive for SMD blindness and is mailing a prepublication copy of the trial results to every ophthalmologist in the United States. It is conveying the study results to primary care physicians and is also attempting to make persons with SMD aware of the symptoms: blurred vision, distorted vision and blank spots in central vision. Persons with these symptoms should see an ophthalmologist immediately, the NEI stresses, since leakage can be treated by laser only if the procedure is performed within a few days of their onset. Retinal surgeons who can use lasers to treat SMD blood vessel leakage, Fine said, can be found in most areas of the United States.

The projected \$2.5 billion in tax savings, Wyngaarden explained, was computed from the number of Americans with SMD who would go blind each year if not given laser treatment and how much it would cost to maintain them with Social Security and Medicare and perhaps with nursing home care as well until they lived out their natural life expectancy. —J. A. Treichel