

disease spreads from one structure to another in the eye, and, as a final result, there may be not only loss of sight, but also, eventually, destruction of the eye, and even sometimes ex-cision of the eye on account of the severe pain.

I have given this brief summary in order to impress upon you the necessity and value of successfully grappling with so persistent a disease. I shall now give an illustration by narrating a case in which the success of the treatment followed has surpassed my expectations.

On November 29th, 1890—that is, one year and a half ago—Robert M., æt. 50 years, was sent to me by Dr. Tucker, Orono. The general condition was that of chronic rheumatism, as stiffness, pain; some of the joints, especially the ankles, tender to the touch; swollen especially after rest; general health very fair; great loss of weight; muscles beginning to atrophy; hair almost white; in fact, so crippled was he that it was with difficulty he walked into my consulting-room by the aid of a stout cane. His occupation is that of a farmer and agent for agricultural implements, which entails a good deal of exposure. This latter seems to have been the chief cause of the disease.

The condition of the eyes was serious. The centre of each cornea was studded with closely-placed and small infiltrations, occupying a space greater than the pupillary area. In the left eye these spots were beginning to assume an appearance of almost calcareous degeneration; no iritis, the pupils being active and dilating fully under atropine. With the ophthalmoscope the vitreous was slightly hazy. No changes were seen in the fundus. This view could be obtained through the surrounding clear cornea. This haze of the vitreous was regarded as serious, pointing to a gradual extension to the deeper structures.

The first attack of the eyes began about two years ago. After each relapse the eyes were quiet, but the intervals became shorter and the relapses more severe, till, at the time of consulting me, the vision of each eye was very poor, viz., no letters of Snellen's type at 20 feet, and only a few letters of No. 20 of that same type at 6 inches with proper presbyopic correction, and the left No. 15 of the same type. He could not even guess the time on looking at

the face of a watch with large figures and hands. He said after each relapse the sight was much worse. He informed me that he had been under the care of a specialist, and, though given careful treatment by local and constitutional remedies, his eyes were now rapidly getting worse. In order to arrest the disease, an iridectomy had been advised.

On placing himself under my care, I at once began the hypodermic injection of pilocarpine. He remained with me for the period of three weeks, and during that period I gave an injection every day, the quantity varying from gr. $\frac{1}{8}$ to gr. $\frac{1}{2}$. Before he left he could easily make out the time by the watch. He returned every two months, and remained each time from eight to ten days, receiving a hypodermic injection every day.

From the beginning of the treatment there was a constant uninterrupted improvement both of the eyes and general condition. The eyes have progressed most satisfactorily; no relapse has occurred, and now he reads words of ji., and $\frac{20}{100}$, with a good attempt at $\frac{20}{70}$, Snellen's type. The reason that ji. is not read more clearly is that the corneal haze is greater below than above. The corneal infiltrations have so changed that to the ordinary observer the eyes seem almost clear, whereas at the beginning their condition was most plainly evident. I now feel persuaded that this absorptive process will continue till each cornea becomes clear.

I may also mention that I used a solution of eserine, gr. $\frac{1}{4}$ ad. \bar{z} i., once daily on retiring, during a considerable part of the time. This, however, was only regarded as an aid, but almost valueless of itself.

I gave the injections in the afternoon, pursuing the following routine: He went to bed clothed in a thick flannel suit. The temperature of the room was 70° to 80°. The perspiration which ensued after using the medicine was usually so profuse as not only to soak the flannels, but also to wet the sheets, and the saliva ran very freely from his mouth. After its employment the patient did not venture out that day, but the next he did so freely, always, however, remaining in an hour or so before the medicine was again used. Three hours usually elapsed from the time the injection was given till he