

falling vision, introduced a factor which demands its full significance in both diagnosis and prognosis. I refer to his patellar reflexes which were wholly wanting (which suggested locomotor ataxia), and are not usually absent in tobacco amblyopia.

He could stand with closed eyes with his feet together without swaying, and walk without the characteristic gait of locomotor ataxia, though there was some hesitancy in his steps which could not with certainty be attributed to its most probable cause, imperfect vision making them uncertain. Neither had he lightening pains nor gastric crises, nor had he ever had syphilis.

His colour sense was tested and found imperfect, as amblyopia was marked. But where the interest of the case hinges is, that for small pieces of colour $\frac{1}{8}$ (one-eighth) of an inch square, he was blind—not positively blind, for he could imperfectly see the piece held directly before either eye at about three feet, the opposite eye being closed.

But when moved a few inches peripherally in any direction, while his eye maintained its fixed position towards the front, colours could at once be recognized. This was more particularly the case for green and red, which appeared black. The extent of the field for white being unbridged.

For many years he has been a great smoker, and also drank spirits freely—the form of smoking being the pipe, the kind of tobacco, our own Canadian grown, home cured, in which he continuously indulged while at work, many hours both by day and night. The case is undoubtedly one of tobacco amblyopia, in which alcohol perhaps has a share.

Another similar case of a milder form has been met with during the past year in my own practice, and others have been seen at hospital clinics abroad, one of which I took notes of in the Royal Ophthalmic Hospital last summer.

A man aged sixty-two, whose sight had gradually failed so that when he came under observation his vision was reduced to $\frac{1}{8}$ ($\frac{2}{100}$) in either eye, having also well defined amblyopia for colours (colour scotomata). He had smoked one ounce of Cavendish daily, after leaving off which for three months it improved, simply from abstinence from tobacco, to the astonishing degree of $\frac{1}{4}$ and $\frac{1}{2}$ for right and left eyes respectively, or from the top of

Snellens' wall type to the bottom, the colour scotomata having disappeared.

The patient under consideration has faithfully abstained from tobacco since he came under observation (exactly one month ago), though he has continued his whiskey which, he says, averages five or six glasses a day—the only medicinal treatment being moderate doses *tr. nucis vomicæ*, and also Donovan's solution, which have not been regularly taken. The improvement of vision was very marked, increasing from $\frac{1}{8}$ ($\frac{2}{100}$) to $\frac{3}{8}$ or $\frac{1}{10}$ in his right eye, and from $\frac{1}{8}$ to $\frac{1}{6}$ in his left eye.

His near vision from Jæger 19 at 20 cent. to Jæger 16 at 30 cent. in his right, and from Jæger 10 at 20 cent to Jæger 12 at 30 cent.

His patellar reflexes are still absent, excepting to a slight degree on the right side. The scotomata for blue have disappeared, those for red have diminished, while green still remains.

Jan. 30th, 1893—Later notes "up to date," showing patient's condition.

He has written me a very legible letter, expressing his gratitude for his marked improvement, saying he resumed his duties two months after coming under treatment.

Yesterday he presented himself to me for the first time since his case was reported to the society three and a half months ago, when I found that, though he had vastly improved, so that he could write and read ordinary print for any reasonable time, he had not wholly recovered.

His vision now equalled $\frac{1}{4}$ ($\frac{3}{8}$) in either eye, a little clearer in the left. With - 1.50 spherical glasses one more line could be read, and Jæger 6, for near vision without glasses. His perception for small pieces of colour is much improved, green and red being still imperfect, especially for the former: red, though it is distinguished centrally, is done so more readily peripherally. The ophthalmoscope still reveals marked pallor of the temporal sides of the disc, apparently little changed since last examination. There is no thinning of the lamina cribrosa or stippling to indicate atrophy. The patellar reflexes have only slightly returned.

Central colour scotomata may be produced by several poisons, tobacco and alcohol being the