

chief agents. Tobacco amblyopia was first described by McKenzie in 1854, and since has been carefully investigated by such men as Hutchinson, Forster, Hershberg, and others, and their conclusions in the main agree, so that central toxic amblyopia is amongst the best established facts in ophthalmology.

It is always symmetrical, and usually to the same degree in either eye. In the case we are considering, the vision in the right is more affected than the left, or was so at the first examination which has since become equalized, the right, the worse eye, having recovered more rapidly than the left, the better eye.

In considering this central loss of colour sense, it is necessary to remember that the normal eye has not the power to distinguish colours over its entire fundus, that is, over the whole area of expansion of the optic nerve; but that colour perception is divided into concentric circular areas, having for their centre the fixation point.

The smallest circle is for green, outside this a larger one for red, then yellow and blue. All colours normally can be perceived within the area for green, but green cannot be perceived beyond its own narrow boundary; and so on outwards for red, yellow and blue, and lastly, white, which includes the whole field where no colour can be seen.

The explanation of the central loss of colour perception lies in the fact that there is in these cases a retrobulbar neuritis of the optic nerve before it reaches the globe, and that all fibres of the optic nerve do not extend into the retina equally far; but those from the outer temporal side extend only a short distance from the disc, while its central axial fibres extend more peripherally. Pathology has verified these conditions. Central colour blindness must not be confounded with congenital colour blindness or Daltonism, where there is inability to distinguish one or more shades of colour. The prognosis is usually good, provided tobacco be given up, and that neuritis has not given place to atrophy.

In the present case, amblyopia being extreme, together with the absence of patellar reflex, made the prognosis more guarded. I mention the kind of tobacco which is excessively strong, thinking it may be more potent in its influence than other sorts, though the kind and amount is generally

thought to have little influence. As he still has imperfect vision, I have advised him to give up alcohol as well as tobacco, which I have confidence he will do, hoping a further improvement will take place should any of his trouble be due to it and not to atrophy following interstitial neuritis.

That the case is one of toxæmia due to tobacco, is, I think, sufficiently proven by the very great improvement in so short a time after giving up tobacco while he continued to drink, as he says, five or six glasses of whiskey a day. As he is still under observation, I hope at another time to have the pleasure, with your permission, of presenting to this Society further notes of this instructive case.

CLINICAL NOTES ON A CASE OF SYPHILIS OF THE SPINAL CORD.*

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Thinking the following case might be of some interest to the Society, from a physiological as well as a clinical point of view, I take the opportunity of laying it before you. The case, let me add, I owe to the kindness of our President, Dr. Temple, to whom I am much indebted for it.

The history taken from my case-book is briefly as follows:—

S.I.V., aged twenty-seven, married three years, no children.

Family History.—Father alive and healthy. Mother died eight years ago of heart disease. He has three brothers and one sister, all healthy. No consumption or nervous disease in family.

Precious History.—Patient was never ill until the present. About two years ago he contracted a hard chancre. His mouth was affected and his skin covered with a rash. He underwent treatment for about six months, when, thinking himself cured, he discontinued it and was quite well until present trouble appeared.

Present Illness.—Began about four months ago, when he noticed a twitching of the muscles of right

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