indicate the elements of which I conceive these faculties to be made up, and to suggest the probable order of their influence. The assigning of relative values to the various factors and the determination of their modifications according to circumstances whether of environment or of ocular conditions, are points upon which the many important practical bearings of this subject will depend.

REPORT ON OPHTHALMIC CASES IN EGYPT, 1915

BY

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LIEUT.-COLONEL R.A.M.C.

THERE appeared in the August, 1917, number of this Journal valuable reports on the ophthalmic work done in Egypt in January, 1916, of the period Lieut.-Colonel Eason, C.M.G., Consulting Oculist, E.E.F., and from Major F. Lockhart Gibson, A.A.M.C., who was at Mudros in the latter part of 1915, and in Egypt for part of 1916. Both of these reports relate to the period when the work in Egypt was well organized, when appliances were freely obtainable, and when medical assistance was abundant.

1. I propose to complete the story by describing the ophthalmic work in Egypt during the period of improvisation, viz.: from the beginning of 1915 until November of the same year, when I was invalided out of Egypt. The actual work began about January 24, 1915, at the First Australian General Hospital, Heliopolis, where an ophthalmic and aural department was opened, to which patients speedily found their way. As there was no ophthalmic or aural surgeon available in Egypt at the time, I was appointed consulting oculist (and aurist) to the Force in Egypt, and the greater part of the work was done at Heliopolis. As the year passed by, oculists began to arrive in Egypt, and decentralization was gradually effected. The staff at Heliopolis usually consisted of two or three assistant surgeons, one medical student, and two nurses in the out-patient department, with the use of a ward of 100 beds. The assistant surgeons were mainly Captain Morlet, Captain Rosenfield, Captain Stevens, Captain MacLellan, and Captain Burke, A.A.M.C., and Mr. Cook and Mr. Wharton, medical students. The clinique was available, and utilized freely by British, and New Zealand, as well as Australian troops. In passing, it may be said that the work was very extensive and heavy, and that there was a considerable amount of operative work after the Dardanelles landing.

2. As regards the nature of the diseases treated, the results were a surprise to those who, like myself, had no previous experience of military work. Of the ophthalmic cases, half were cases of ophthalmia, principally of the Weeks's variety, with a smaller percentage of diplo-bacillary cases. There were only five cases of gonorrhoeal ophthalmia during the whole period, a most remarkable circumstance when the frequency of venereal disease is considered. Errors of refraction comprised nearly 40 per cent. of the cases, so that the cases of ophthalmia and refraction constituted the greater portion of the work; 90 per cent. in all. There were very few cases of trachoma, and nearly all of them came from Australia. It is not a little remarkable in a country where trachoma is so exceedingly prevalent as Egypt, that practically none of the soldiers contracted it. The circumstance throws a flood of light on the supposed contagious nature of trachoma amongst Europeans, and, incidentally, on the legislation adopted in the various countries with regard to persons suffering from trachoma.

3. After the landing at the Dardanelles, a fair number of injuries made their appearance, and a considerable number of eyes were excised. A few operations were performed for cataract and the removal of foreign bodies, and in a number of cases projectiles were removed from the orbit. One death occurred after the removal of a projectile from the apex of the orbit, and, after death, a second bullet was found in the brain. Many of the eyes which were excised had not been directly injured; in some cases the projectiles had not passed within an inch of them, nevertheless the internal coats were torn, and the eyes hopelessly disorganized. Whether this arises from the velocity of entry of the projectile, or from its rotation, we were unable to decide, but the cases were fairly frequent, and the conclusion certain.

4. *Removal of foreign bodies.*—Many of the foreign bodies in the interior of the eye were non-magnetic, and the eyes were hopelessly disorganized. The large magnet at Mansourah, which is under the control of the Public Health Department, Egypt, was placed at our disposal, but few cases made their appearance in which its use was necessary or of service.

5. *Shell shock.*—Of genuine shell shock cases, i.e., shell concussion, we saw a few cases. Men who showed no sign of external injury complained of defective vision in one eye, and showed haemorrhages into the retina. Whether these were due to direct concussion, or, as Dr. Mott suggests, to gassing, I do not know. They were not common, but there were a few definite cases. The remaining so-called cases of shell shock were, when genuine, obviously cases of hysteria, and there were very few of them. A common type of case was the man who screamed at the light, turned his face to the pillow, and closed his eyes violently; and of

these cases nothing more need be said than that their recovery was usually a matter of a day or two.

6. *Malingering*.—A fair number of malingerers made their appearance at first, and gave a great deal of trouble by reason of the elaborate examination that such cases necessitated. As soon, however, as they realized that an expert department had been created in Egypt, the numbers fell off, and the numbers ceased to be of any great importance. There is, however, a type of case much more difficult to handle than the true malingerer, viz., the man with a tendency to neurasthenia or hysteria, who exaggerates his symptoms, and who is subconsciously endeavouring to prove that he is really worse than the medical officer thinks he is. This singular nervous mixture is sometimes very difficult to deal with. There is no sharp line to be drawn between the element of fraud and the element of nervous demoralization. However, difficult as the problem may be, I am quite convinced that the only mode of treatment which is effective is that based on the absence of morbid sympathy, and based directly on the induction of a normal morality. In these cases the sympathetic lady visitor is apt to be highly dangerous. In such cases, when a complete examination of the eyes showed that there was no disease of fundus or media, and the error of refraction was simple, we disregarded altogether the man's statement respecting his accuracy of vision and discharged him to duty after a reasonable rest, and I think I can say with confidence that in not one single instance was a mistake made.

7. It must be remembered that in the early part of 1915 the issue of spectacles to the men had not been authorized, and arrangements were made at first, whereby the men could purchase their own glasses at reasonable rates from opticians in Cairo. Later on, the War Office authorized the issue of spherical glasses. By this time, all concerned had become aware of the fact that it is useless to order glasses for men in the field, unless their vision is considerably improved by their use. It also became obvious to those who watched the work, that high standard vision is not required of modern soldiers. Those who have rendered themselves artificially myopic, as I have done, for the purposes of investigation, will be surprised to find how much they can see in the way of common objects with a vision of $6/24$ ths. I published an account of an investigation of the kind I made in connection with the visit of the British Association for the Advancement of Sciences to Australia in 1914. So far as mariners at sea are concerned, the real danger of defective vision, that is a vision of anything below $6/12$, is the reduction of the colour-sense which follows. $6/12$ form vision would not materially interfere with the activities of people in most occupations, but $6/12$ vision or less for pilots or

engine drivers may be a serious matter, because of the great reduction of colour perception with which it is associated. In the case of the ordinary soldier this condition does not arise, and there is no doubt that standards of visual acuity set in the past have erred on the side of stringency.

8. *One-eyed men.*—It was decided in 1915 to invalid out of the country men with only one eye, because of the supposed risk to the other eye from ophthalmia. We have since learned that the risk of losing an eye from ophthalmia in Egypt is negligible. The policy of sending one-eyed men to the front was dealt with by the Army Council subsequently, but a one-eyed man runs very little more risk of losing his eye in Egypt than he does in England, apart from the risk of active service. He may, it is true, get odd attacks of irritation from the dust, but of serious ophthalmia there is very little risk. One remarkable case came under notice: an Australian who had lost one eye from detachment of the retina determined to go to the Dardanelles. He eluded authority, and got to the Dardanelles, was injured in the blind eye, and returned to Heliopolis to have it excised.

9. *Statistical.*—The following list is a classification of a number of the cases attended to during this period. It does not include, however, anything like the total treated, for a number of reasons. Only those who were in Egypt in 1915 will ever realize the difficulties which were encountered, owing to the lack of material and of skilled assistance during the rush which followed the Dardanelles landing. The list stated represents the cases of which notes were taken, and which were treated at No. 1 Australian General Hospital, Heliopolis. Owing to the lack of clerical assistance, they do not include nearly the whole of those cases, and they do not include any of the cases treated in the other hospitals. The list, however, does give an indication of the relative distribution of cases and of the operative work, and must be read solely as an indication of that distribution:

Ophthalmia (chiefly Weeks's and a percentage					
of diplo-bacillary)	...	...	...	...	546
Blepharitis	...	...	...	...	15
Pterygium	...	...	...	...	8
Corneal opacities	...	...	...	...	6
Trachoma	...	...	...	...	17
Iritis	...	...	...	...	12
Cataract	...	...	...	...	8
Foreign bodies in eye	...	...	...	...	14
Old injuries	...	...	...	...	9
Detachment of retina	...	...	...	...	2
Strabismus	...	...	...	...	16
Concussion blindness	...	...	...	...	4

Refraction cases:

(a) Hypermetropia	...	...	...	210
(b) Myopia	...	...	...	30
(c) Hypermetropic astigmatism	...	...	...	230
(d) Myopic astigmatism	...	...	...	15
				— 485
				1142

Operations performed

Excision	...	...	...	...	...	36
Iridectomy and extraction	...	...	...	...	...	11
Removal of foreign bodies	...	...	...	...	...	7
Pterygium	...	...	...	...	...	4
Minor operations	...	...	...	...	...	6
						— 64

Summing up the work, it is obvious that the business of an oculist in a war zone does not include the fine work he is accustomed to in civil practice. The greater part of his time is taken up with the treatment of ophthalmia and the cases of errors of refraction, but there is imposed upon him a far greater responsibility than appears in these activities. It is his business to discriminate between the cases which are fit and which are unfit for duty, and to see that the cases of hysteria and fraud are kept in the lines, and trivial cases treated at the front. It is his business to return those who do reach the base as rapidly as possible. In order to be useful and effect this result, he has to superadd to the expert knowledge gained in civil practice an entirely new and military objective, which calls into place a series of judgments which take time in acquisition, and are exceedingly valuable when once acquired.

ANNOTATIONS

The Beauty Specialist

We wish to draw the attention of ophthalmic surgeons—and would ask them to keep a record of cases which come under their observation—to patients who have been operated on by unqualified men trading as beauty specialists, under their own name or more frequently that of a fictitious institute. The following case has been brought to our notice.—A woman, aged 37, desirous of becoming a cinema actress and who, as she described it, had “baggy eyes,”