of his predecessor and similarly a nurse understudying the 'charge nurse.' Only with such a team is it possible to demonstrate the smooth sequence of operative steps efficiently and expeditely.

THE OPHTHALMOLOGICAL SOCIETY OF AUSTRALIA
(British Medical Association)*

Annual Meeting

The sixth annual general and scientific meeting of the Ophthalmological Society of Australia (British Medical Association) was held at the Royal Australasian College of Surgeons, Spring Street, Melbourne, on October 23, 1946. The President, Dr. J. Ringland Anderson, occupied the chair. Those present included three members from Queensland, ten from New South Wales, thirty-one from Victoria, two from South Australia and two from Western Australia.

President's Address

The President, Dr. J. Ringland Anderson extended a welcome to such guests as had been able to attend, but particularly to Air-Commodore P. C. Livingston, C.B.E., A.F.C., F.R.C.S., R.A.F., who had flown from Singapore to attend the meeting. A tribute was paid to the Ophthalmological Society of the United Kingdom.

Blindness was considered as our common enemy. Various ways in which it is most frequent were dealt with as if blindness was an anthropomorphic enemy. These ways included congenital cataract, tumour formation and the effects of trauma. Defects in our defence against this enemy were discussed, such as those that occur in our training of the recruits and in our vision of the enemy. It was emphasised that we must see not simply the disease but the individual as a whole, and he in his social and his cosmic setting if we are to obtain a complete view of our patient's problems. The slow evolution of the spirit of medicine through the ages was briefly traced. It was suggested that bureaucratic control could unwittingly interfere with this spirit and blindness ensue.

The victims of blindness and their rehabilitation were considered. It was decided that many of them saw in life what many of us who are "sighted" fail to see. Reference was made to what was called real blindness and to the influence of atomic warfare.

Unveiling of memorial to the late Major Z. Schwartz

A bronze tablet, in perpetuation of the memory of the late Dr. Z. Schwartz, who was killed in action on April 10, 1941, was unveiled. Doctors A. S. Anderson and T. a'B. Travers spoke with

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deep appreciation of the colleague the Society had lost and of his contribution to the establishment of the Medical Eye Service of Victoria. It is intended to hang the tablet in the premises of the Medical Eye Service.

The Relationship between Night Vision Testing and Night Vision Training in Aerial Warfare

Air-Commodore P. C. Livingston described the early experiments carried out by the R.A.F. in night vision and its influence on flying. He traced the gradual development of the rotating hexagon and discussed its virtues and its limitations. The term "night visual capacity" was shown to be very useful. The factors which tend adversely to affect this capacity were considered. Particular attention was paid to anoxia. Its effects on the hexagon test and on the erratic involuntary ocular movements were shown by slides. The night vision screen test was described. Fields were shown to exhibit the results of anoxia, vitamin A deficiency, retro-bulbar neuritis and diabetes. The probable trends of future development were discussed.

The Cure of Heterophoria in Air Crew—Its Clinical and Psychological Significance

Air-Commodore P. C. Livingston, R.A.F. described the changed outlook on the influence of heterophoria on flying. Reference was made to the origin of certain tests and to their usefulness. Their susceptibility to psychological and neuro-muscular influences was considered. The value of orthoptics both before flying training and as a means of rehabilitation was emphasised. Tribute was paid to the work of English orthoptists during the war. Cases of special interest were received and the results of their orthoptic training were described. Speculation was made regarding future developments.

The rôle of Orthoptic treatment

Miss Diana Mann (Melbourne) read a paper which attempted to show types of squint and other defects suitable for orthoptic training. It was assumed that treatment was not justified when results were slow or uncertain. Treatment was most useful for accommodative squints, certain occasional squints, and as an adjunct to operation for certain symptoms of eyestrain which did not respond to correction of refractive error. In such cases lack of voluntary control of convergence was more significant than muscle imbalance. Success always depended on the patient's mental and physical health and powers of concentration.

Concussion Glaucoma

Dr. Arthur D'Ombrain (Sydney) attempted to clarify the views expressed in an earlier paper upon traumatic glaucoma.
The nature of the lesion was defined as a true chronic non-congestive glaucoma, and attention was drawn to the delay in the onset of symptoms, as this was evidence that no gross visual upset occurred at the time of injury. Three types of trauma occurred in these cases, namely:—blows upon the eye, injury to the skull and heavy falls.

These injuries could be regarded as forms of concussion and the resultant chronic glaucoma was suggested to be one of the several possible results of concussion of the ocular bulb. Additional case histories were described.

In conclusion, the hypothesis was put forward that these cases were indicative of a condition which might be named “concretion glaucoma,” and that the mechanism of their production was that of a sclerosing lesion initiated by trauma, a fibrosis of the ciliary region or of the venous-capillary bed. This fibrosis is progressive and goes on to the production of the ocular oedema known as glaucoma.

Such a hypothesis explained the remoteness of the history of injury in many of the cases. The lesson was not too hastily to diagnose every case of chronic glaucoma in an eye as a bilateral disease, for it might turn out to be a monocular lesion secondary to a concussional trauma.

A Survey of Retrobulbar Neuritis in Prisoners of War

Dr. S. R. Gerstman, as an ophthalmologist at 115th Australian General Hospital, Heidelberg, at Stonnington Red Cross Rehabilitation Centre for blinded servicemen, was associated with many cases of what was now called retrobulbar neuritis due to avitaminosis. Results of examination were described and vision of all cases at both institutions were summarised. Fundi and fields were discussed and treatment and prognosis were described. Dr. Gerstman gave details of rehabilitation and mentioned the percentage of disability and pensions. Possible liaison with St. Dunstan’s of England was also suggested.

Dr. R. B. Maynard who had been a prisoner in Changi camp described the microscopic findings of the ocular tissues he had brought back. Unfortunately his difficulties in preserving the material were such that the detail was not very good. He considered that the changes were such as have been attributed to beri-beri.

Retrobulbar Neuritis and deficiency disease

Dr. Clifford S. Colvin (N.S.W.) gave a short survey of men who had returned from imprisonment in the Halmaheras, Ambon, and Borneo. These men were first seen at Morotai and others came from Changi and Kranji camps where Majors Claffey and Orr had looked after them. The men examined comprised English, Dutch, Australian and Indian troops and a few Dutch women.
It was suggested that possibly an unknown factor in addition to vitamin deficiency was to be looked for in this type of case. Its effects on other parts of the eye and ocular functions, were also considered. Dr. Colvin said that one definite case of vitamin A deficiency was encountered responding well to treatment. Some men who lived under similar conditions showed no defects or symptoms, yet their diet must have been similar to those who did get symptoms. Men of all ages were affected by the disease and apparently age was not significant. Some men who said they had blurred vision a year or two previously when examined had normal vision of 6/5.

Dutch civilians, men and women, who had been examined, showed both normal and defective vision. The few children who had been examined showed no defective vision.

Men from Ambon, Dr. Colvin continued, who had no specialist treatment, showed some who were affected mildly and severely and others who showed no effects at all. The rice ration in Ambon was about half that in Singapore. The incidence of defective vision seemed lower in men who had returned from Kuching in Borneo.

The general symptoms were usually numbness of the feet—feeling of pins and needles—aching in toes, feet and arches, with difficulty in walking. Back of the calf tender and knee joints painful—often associated with conjunctivitis and "glare"—vision then became blurred, oedema of legs and body occurred later, and most patients described themselves as having "beri-beri."

Inherited Retinal detachment

Dr. J. Bruce Hamilton (Hobart) presented a pedigree of inherited juvenile retinal detachment. A total of ten patients, with 20 eyes, of the pedigree were examined. Six patients with a total of ten eyes were refracted and the whole were refracted and the whole were hypermetropic. Of the total ten patients examined five had retinal detachment involving seven eyes. Of these seven eyes, three had pseudo-glioma, one retinitis proliferans, and one a detachment which reattached itself. A further two of the ten patients examined had unilateral complicated cataracts, and loss of projection with undoubted detachments behind them. Dr. Hamilton said it was therefore safe to presume that seven patients and nine eyes were involved with detachments in the pedigree. Of the remaining eleven eyes, one had a retinal cyst with peripheral choroid-retinitis, and three eyes had peripheral choroid-retinitis without retinal cysts. One eye of the twenty examined had aniridia.

Dr. Hamilton then discussed the inheritance of polycystic disease of the kidneys, liver and pancreas, and the inheritance of congenital cystic disease of the lungs. He was able to show a film of one patient from his pedigree with retinal detachment in both eyes and pseudo-glioma who had congenital cystic disease of the lungs in an
advanced state. He asked if members of the Society would enlighten him as to the relationship between congenital cystic disease of the lungs and inherited juvenile retinal detachment. He felt that they were both due to generalised congenital cystic disease involving the eyes and the lungs for at least two reasons:—
  (a) that the retinal cysts become infected and appeared as pseudo-glioma just as the lung cysts became infected and bronchiectasis ensued and
  (b) the fact that like lung cysts, retinal cysts ruptured and the detachments re-attached themselves.

Angeoid streaks of the Retina

Dr. J. D. Maude (Sydney) gave a description of cases of angeoid streaks of the retina with pseudo-zanthoma elasticum. Dr. Maude also gave a short review of contributed cases by other members, and discussed the literature.

Pigmentary abnormality in children congenitally deaf following maternal German Measles

Dr. E. O. Marks (Brisbane) said that though incidence of congenital cataract did not rise in Brisbane as in Sydney, Melbourne and Adelaide, there were serious “epidemics” of deafness and cardiac defects. Half the deaf children born in the years 1937, 1938 and 1941, however, showed retinal pigmentation while those born in other years were normal. The appearance resembled a typical form of retinitis pigmentosa.

Intracapsular cataract extraction, its most serious complication

Dr. F. Gregory Roberts (Sydney) said that the condition described consisted of a progressive retraction upwards of the iris following a technically perfect operation. It was not connected with the loss of vitreous at the operation or of any subsequent burst through of vitreous. The types of patient in which the condition occurred were described and treatment suggested.

The Future of Ophthalmology

Dr. K. O’Day (Melbourne) said that because of lack of teaching of the subject, ophthalmology in Australia had always rested on a very insecure foundation. Examinations held in the past had not been very satisfactory, and the facilities provided for training were quite inadequate. Histology should be made a living subject, and a library of slides for the teaching of histology and embryology should be available. Physiology should provide a sound introduction to clinical ophthalmology. The clinical aspect of the subject should be
taught from the patient and not from a book. It must of course rest on a sound basis of pathology. The opportunities available have been neglected in the past. Without a sound basis of pathology, no progress could be made. Adequate direction was essential, said Dr. O'Day, and this could be provided for by a Chair of Ophthalmology at the University.

A clinical meeting was held on Saturday morning, October 26. A series of very interesting cases was demonstrated. Dr. Kevin O'Day demonstrated the rapid method of celloidin embedding and a large number of slides of ocular tissues of Australian animals. Dr. Ringland Anderson demonstrated the projection and the polaroid methods of investigating diplopia. He emphasised the value of "dividing" diplopia into a component for each eye, and he described the association of palsies of one superior muscle of each eye, of one inferior muscle of each eye and of both superior oblique muscles.

### Annual Dinner

The Annual Dinner was held at Menzies Hotel, and was attended by 45 members and the following guests:—Air-Commodore P. C. Livingston, R.A.F., Professor P. MacCallum, Professor Sydney Rubbo, Air-Commodore E. A. Daley.

The President announced that Air-Commodore Livingston had accepted honorary membership of the Society. The announcement was received with applause.

The President offered the congratulations of the Society to Dr. N. McA. Gregg, who had received the Shorney Prize, at its first award, for his work upon "Congenital cataract associated with maternal rubella."

### Annual General Meeting

The annual general meeting dealt with general business. Particular attention was given to special problems, including ophthalmic education and the future of ophthalmology.

Dr. Darcy A. Williams (New South Wales) was elected President for the ensuing year.

It is proposed to hold the seventh annual general and scientific meeting at Sydney in the week September 1 to 6, 1947.

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