

several speakers thought, was the creation of a new career grade, a permanent post at a lower level than a consultant. But this is a contentious matter, and even the conference could reach no conclusion on it. On the other hand, some speakers considered that doctors selected for specialist training should be chosen much earlier than at present and required a more formal course of training—for example, on the lines suggested by Professor G. A. Smart. Sir Robert Aitken considered that these new training schemes would be best administered by a small regional committee composed of a representative from both the universities and the Colleges.

Several of the ideas produced at this conference were brought out into the open for the first time. Unlike some of those canvassed at other conferences, most of them could be put into effect without too much difficulty or expense. Some people may argue that the present, with its shortages of doctors and money, is not the time to do this. Many doctors who have emigrated, however, have emphasized the lack of proper training in Britain as one of the main reasons for their going. Organized schemes of vocational training might do more to halt the "brain drain" than many people would think possible.

Early Diagnosis of Retinoblastoma

It would be difficult to imagine a more tragic malignant disease of childhood than retinoblastoma, for even if the threat to life is not realized the daunting sequel of partial or total blindness remains. But early diagnosis gives a chance of successful treatment.

The disease is congenital in origin, the tumour arising from the nuclear layers of the retina, and it usually develops from multiple foci in the eye.¹ On the average it occurs about once in 25,000 births, and has been considered to be bilateral in 20 to 30% of cases,² but as the survival period of patients with unilateral disease improves it is becoming clear that these figures need some revision. In a recent survey of cases seen in the Department of Pathology at the Institute of Ophthalmology, London, A. Taktikos³ found the incidence of bilateral cases to be as high as 39%.

It is now apparent that the affliction need not be so threatening to life as was once thought. Though it frequently robs a child of one eye, the prognosis for life is improving as new methods of treatment are evolved. Whether or not prognosis is related to the degree of histological differentiation of the tumour cells remains an open question. Taktikos³ found no such relationship, whereas D. H. Brown⁴ found a direct relationship between prognosis and the degree of differentiation. On the other hand, there is no disagreement that prognosis is worse as the tumour spreads to ocular structures beyond the retina and to extraocular tissues.

Retinoblastoma may be inherited as an autosomal dominant characteristic with irregular penetrance.⁵ Though most of the cases at present are sporadic, arising through spontaneous mutation, there is bound to be an increase in familial cases as

patients who have recovered from the disease survive to reproduce. Thus a moral question enters the problem.

Early diagnosis is the cornerstone of successful therapy, and the ominous significance of a white pupil cannot be overstressed. More rarely, the tumour first attracts attention by an inequality of the pupils, by circumcorneal injection and lacrimation without iritis,⁶ or by the presence of a squinting eye, especially if it is unable to fixate on a small light. All children so affected require a careful examination of the fundus under general anaesthesia with the pupils maximally dilated. Moreover, since the hereditary features of the disease are so tragic, the siblings of patients with retinoblastoma and the offspring of those who survive the disease should undergo similar thorough examination.¹

The tumour usually appears as a raised yellow or pink mass in the fundus with prominent vessels on its surface. It may be nearly white in colour and there is commonly more than one tumour to be seen.

Treatment is usually directed to enucleation of the one eye in unilateral cases, for the disease is frequently far advanced when the diagnosis is made. When both eyes are involved the more seriously affected eye is usually removed and the other is treated with a view to destroying the tumour and yet preserving as much vision as possible. A treatment at present being used, especially in America,⁷ is fractionated doses of x rays, directed through nasal and temporal portals to avoid the radiosensitive lens and trabecular meshwork, while H. B. Stallard⁸ in Britain has pioneered the use of radioactive applicators sutured directly to the sclera overlying the growth. Both these methods may be augmented by giving radiomimetic drugs, and these are all that is available for the treatment of widespread metastases. The role of diathermy and photocoagulation is less well defined, but they have a place in special cases.

Now that therapy which will destroy the tumour and allow preservation of useful vision is available, all doctors have a special obligation to be aware of the possibility of retinoblastoma, and in this connexion the serious import of a white pupil in an infant or young child cannot be overemphasized.

Sweat Sodium and Blood Pressure

In a thought-provoking paper from Maracaibo, Venezuela, J. Quintero-Atencio¹ and his colleagues report that the sweat of hypertensive patients is less concentrated than that of the normal person. Not only that, but these workers go further and suggest that there is an inverse correlation between blood pressure and concentration of sodium in the sweat which even holds for blood pressures within the normal range.

The electrolyte composition of sweat is controlled by adrenal cortical hormones. Corticotrophin² and desoxycorti-

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