

Correspondence

Corneal and skin changes in tyrosinaemia

TO THE EDITOR *British Journal of Ophthalmology*

SIR, In 1973 a paper was published on the subject of corneal changes in tyrosinaemia and skin changes, and the corneal changes in circumscribed palmo-plantar keratoderma were discussed (Westmore and Billson, 1973). The purpose of this letter is to draw attention to a paper describing the subsequent course of the patient who was found to have tyrosinaemia (Billson and Danks, 1975). In this patient high voltage electrophoresis of urine showed heavy excretion of tyrosine. Tyrosyluria was demonstrated by gas liquid chromatography and confirmed by mass spectrometry. Serum tyrosine ranged from 22 to 28 mg/dl (398 to 507 mmol/l) on her normal diet, which turned out to have a relatively low protein content (estimated at less than 2 g/kg per day). A tyrosine load of 150 mg/kg caused the serum tyrosine to rise to 38 mg/dl (699 mmol/l) and this was accompanied by intense pain in the eyes, hands, and feet so that the patient could not walk. A rim of intense erythema developed around the skin lesions. Restrictions of the phenylalanine and tyrosine intake to 40 mg/kg a day of each using a diet based on Albumaid X-PT (Scientific Hospital Supplies Ltd) resulted in a decrease in the serum tyrosine and relief of the discomfort in the eyes and skin within 24 hours. The serum tyrosine has been maintained in the range of 5 to 10 mg/dl for six months. The eye lesions have healed and the skin changes have now resolved completely.

The association of herpetoid corneal ulceration and

circumscribed palmo-plantar keratoderma, separately and together, with tyrosinaemia has been reviewed by Goldsmith, Kang, and Bienfang (1973). There is one further patient in Melbourne with a similar type of tyrosinaemia who is retarded. He has no skin or eye lesions (Louis, Pitt, and Davies, 1974), but he developed pain in the eyes and feet during a tyrosine load test.

The patient who is the subject of this letter is clinically remarkable among cases reported because of the mild degree of her mental retardation. Clearly tyrosinaemia should be considered in all patients with the Richner-Hanhart syndrome or with either of its components, whether or not they are retarded.

Yours faithfully,

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Book reviews

Diabetic Retinopathy. By S. RIASKOFF. 1976. Pp. 64, 39 colour illustrations, 1 table, refs. Junk, The Hague (DG50)

Diabetic retinopathy has been classified by a method based on that of Oakley, and standard pictures serving as examples of moderate and marked lesions in diabetic retinopathy have been prepared. By comparing the signs present in a fundus with those of the standard photographs, the observer is helped to decide on the severity of the case and its prognosis. The standard photographs are in colour and are sufficiently numerous to show all the common lesions of diabetic retinopathy in some detail.

There is a smaller section on the actual treatment of the lesions. The author advocates the coagulation of all visible lesions—including haemorrhages, microaneu-

rysms, new vessels, and pockets of subhyaloid haemorrhage—and it is noticeable that he follows the trend towards extensive retinal ablation.

The monograph is well thought out and produced and will be of great value in training the new generation of ophthalmologists who will be spending an increasing amount of their time treating diabetic retinopathy.

J. H. DOBREE

Korrektive Dermatologie. By J. PETRES and M. HUNDEIKER. 1975. Pp. 111, 84 figs, 21 tables, bibliog. Karger, Basel (DM58)

This book aims at a broad review of the techniques of plastic surgery with specific reference to the dermatological lesions it is desired to remove. Hence it begins with a list of those lesions which may be encountered

including their differential diagnoses and possible treatments. There follows a section on basic techniques such as wound closure, Z-plasty, rotation and transposition flaps. The second half of the book is on the actual procedures which can be used in individual areas and this is amply illustrated with clear line diagrams.

Only six pages are specifically devoted to eyelid surgery, but the book aims at covering a wide field and is not just for ophthalmologists. Although it is entirely written in German, the illustrations are easy to interpret and the 520 references make it a useful introduction to the techniques of and indications for plastic surgery.

J. R. O. COLLIN

Modern Ophthalmic Nursing. By PETER WILSON. 1976. Pp. 64, 72 figs. Edward Arnold, London (£1.50)

This book makes a valiant attempt to help a generation taught by visual images, and for this reason I think it regrettable that a line scale is not given.

The text is more assured on personal medical knowledge than on an accepted nursing range, and for student nurses the section on clinical studies could well have preceded that which deals with abnormal conditions.

J. WILLIAMS

Ocular Photocoagulation: A Stereoscopic Atlas. By F. A. L'ESPERANCE. 1975. Pp. 337, figs. Mosby, St Louis; Kimpton, London (£38.25)

Photocoagulation has now become one of the most effective methods of treatment available to the ophthalmologist, but because of the expense of the equipment and in many countries the lack of training facilities, only a small fraction of the patients who would benefit actually come to treatment. This book supplies a long-felt want and will be of inestimable help to all oculists; those actively engaged in photocoagulation will benefit from the knowledge and experience of one of the most experienced and skilful exponents in the world; those in training or who are relatively inexperienced in photocoagulation will find clear instructions on the techniques employed in dealing with every type of lesion, and those whose role must be primarily that of referring patients to other centres will find considerable help in the selection of suitable candidates for treatment.

The book, which is well produced and very readable, has some excellent opening chapters, including one of great value (by Dr Vassiliadis) on the physics and optics of photocoagulation, and another on the effects of photocoagulation on the ocular tissues. The advantages and disadvantages of xenon-arc and argon laser in dealing with different disease conditions are discussed objectively, and readers may be relieved to find that for most lesions there is little to choose between the two energy sources.

The main bulk of the book deals with the actual technique of light coagulation in a wide variety of fundus diseases. The author shows sound judgement in the space he devotes to the more difficult problems, such as new vessels arising from the disc in diabetic retinopathy, and various types of disease involving the posterior pole.

The illustrations are mainly black and white photographs of the fundus, but they are numerous and well selected. There is also a set of 100 or so stereoscopic fundus photographs in colour which can be mounted in a small plastic viewer (also supplied in the back flyleaf) and these are particularly useful for teaching small groups.

Dr L'Esperance is to be congratulated on producing an excellent textbook which may well prove to be an ophthalmic classic.

J. H. DOBREE

Ophthalmic Diagnostic and Operating Clinics in Rural Asia. By R. W. B. HOLLAND. 1976. Pp. 28. Royal Commonwealth Society for the Blind, Haywards Heath (No price quoted)

It is a privilege to review this booklet written by one of the famous names in cataract surgery. It is about Eye Camps and is essential reading to those who would do this work and of value to all cataract surgeons.

Eye Camps are essentially a second best, but in an expanding Indian population, temporarily estimated at 550 million of which 2 per cent are blind from cataract, there is no choice. Essentially an Eye Camp is an extraction production line with the blind going in and the seeing coming out, but a carefully documented sample reveals excellent results.

The siting of the camp, the logistic problems, and the surgical techniques are described. Graefe section with a conjunctival flap is recommended, extracapsular extraction if the lens bulges after the incision is a common procedure, and the importance of good anaesthesia is stressed. It is interesting to learn that leaving the wound unsutured has as good results as stitching provided there is an adequate conjunctival flap. A neat method of improvisation involves the use of a hand-held lid speculum to prevent pressure on the globe. As time is so important valuable advice is given on the choice of lid operations and a rapid method of carrying out dacryocystorhinostomy.

JOHN SALMON

Orthoptics: Past, Present, Future. By S. MOORE, J. NEIN, and L. STOCKBRIDGE. 1976. Pp. 592, figs, tables, refs. Stratton, New York (\$19.95)

This beautifully-bound volume covers the transactions of the third International Orthoptic Congress. It contains 69 papers read at the Congress from ophthalmologists and orthoptists who are recognized as the leading authorities throughout the world in the study of orthoptics.

Tribute is paid to Dr Hermann M. Burian who unfortunately died before he could take up the office of President.

The book is excellent; it is easy to read and well illustrated. The history of orthoptics is covered by copious references in all the papers; the present state of orthoptics and the close association between the ophthalmologist and the orthoptist in the investigation, treatment, and research in all conditions involving abnormalities of ocular muscle balance is amply covered. There is no doubt that this book illustrates world-wide views held in the history, the present position, and the