
Atopy is a word coined by Coca to describe the occurrence of eczema, hay fever, and lichen of the skin in young persons with a constitutional predisposition to hypersensitivity. The basis of this predisposition is thought to be the presence in the blood or serum of the so-called Prausnitz-Kustner bodies which convey a specific, urticarial sensitivity to normal skin. It is logical to suppose that the lens, being an ectodermal structure, might partake in the general reaction of hypersensitivity, and various authorities have reported cases of this disease in which cataract was an associated lesion; Beetham, in his paper, giving details of ten more.

The rôle of allergy in producing the cataract is not, however, certain, because in 30-50 per cent. of cases the involvement is unilateral and it is difficult to imagine that one lens becomes sensitised while the other does not. Also, negative skin reactions were obtained when aqueous from an affected eye was injected intradermally. One feature, common to the cases was malnutrition, the weight of the patients being from 10-25 per cent. below the normal for their age. This peculiarity was unexplained, at any rate so far as dietetic and endocrine factors were concerned. Two distinct types of cataract were found. The first usually began at the posterior pole, with increased iridescence, vacuoles and precipitates, the changes spreading peripherally and then appearing at the anterior pole. Eventually, the entire cortex became cloudy. Less commonly, a dense irregular plaque formed in the pupillary area of the subcapsular cortex with a varying degree of involvement of the remaining lens matter.

F. A. W.-N.


It has long been known that within the same day there may be marked variations of the ocular tension in cases of glaucoma, and Chandler decided to investigate these changes in a series of 22 patients in whom the indications for operation were in doubt. The usual plan was to admit the patient to hospital and take readings of the tension at 8 a.m., 12 noon, 6 p.m. and 10 p.m. In a few cases, readings were taken in the middle of the night as well. After a day or two without treatment, miotics were employed and the readings
continued for a further few days. The cases tended to fall into 3 groups though the divisions were not always clear cut.

Group 1 comprised 7 patients in whom the tension was always within normal limits and little, if at all, affected by miotics. In spite of this, disc and field changes, characteristic of glaucoma were present in all. Three explanations are offered—(a) That the normal tension for such eyes is in the region of 8-10 mm. Hg and that a tension of 18-25 mm. Hg represents, for them, a glaucomatous state. Proof of this was forthcoming in 3 cases in which miotics were ineffective, but operation which reduced the tension to 12mm. or less prevented further deterioration of fields. In one of these cases, four years after operation, the fistula became partially closed and the tension went up to 20 with a resultant further loss of field. (b) The normal tension is 18-25, but there may be periodic unobserved rises. One case seemed to be of this type. She had been under observation for nine years, during which time the tension had remained at 22, except on one occasion when it rose to 35. (c) There has been a glaucomatous state in the past, which has become spontaneously arrested. Three cases of this type were encountered in which, in spite of the presence of glaucomatous stigmata, no further loss of field occurred during the period of observation.

Group 2 comprised 9 cases in which the tension was sometimes elevated but was maintained at a normal level by miotics. One of these cases was observed for as long as six years without showing an additional loss of field.

Group 3 comprised the remainder of the cases. In these the tension was sometimes elevated and was not satisfactorily controlled by any miotic, so that operation was imperatively indicated.

F. A. W. N.


(3) Koch and Schreiber report experiments in which urethral segments of embryonal and adult guinea pigs were introduced into the anterior chamber of the eye of the guinea pig. In all, eight experiments were made and histologically examined and in each the formation of bone was observed within the newly formed connective tissue of the neighbouring regions of the implant. The formation of bone was plainly to be seen on the 18th day after transplantation. Attention is drawn to the special, if not specific, ability of the urethra to induce the formation of bone.

ARNOLD SORSBY.

(4) Sveinsson describes four cases of extensive peripapillary choroidal atrophy labelling the condition "choroiditis areata." Two of the four patients were a mother and her son, aged 4 years. He points out that islands of healthy tissue may be seen within the atrophic area.

It is questionable whether this is to be regarded as a distinct entity. These cases may represent early stages of gyrate atrophy of the retina and choroid.

Arnold Sorsby.


(5) The value of animal charcoal as an absorbent antiseptic has been known for a long time. It has been used in the treatment of many acute local and general diseases with profit. Persichetti wished to see what happened in the eye after these injections; it seems that no account of this organ had been given previously. He concludes that it is possible to find the carbon in the eye after such injection, but it is generally necessary to repeat the injection more than once. The deposits are found in the vessels and never in the tissues. No pathological change is found in the surrounding tissues and no function is disturbed. There is no evidence that inflammation attracts the deposit of carbon. It is eliminated very slowly, if at all; months after the injection the deposits in the vessels seem unaltered.

Harold Grimsdale.

(6) Cordero (Pisa).—Congenital hole at the macula, and persistent ductus arteriosus. (Foro maculare congenitoe persistenza del dotto di Botallo in soggetto con status dysraphicus vasalis). Arch. di Ottal., March, 1939.

(6) Cordero reports a case of much interest. It is that of a girl aged 19 years, whose sight had never been very good; she had suffered from headache and pain in the cardiac region for some time, with other general symptoms. Her corrected vision was R. 7/10 partly, L. 6/10. Ophthalmoscopic examination showed a deep red patch about half a disc diameter in width and rather smaller in height in both eyes. This was separated from the surrounding retina by a narrow whitish halo which faded off all round. There was about 1 D. difference in level between the surrounding retina and the "hole." The visual field showed an absolute ring scotoma about 20° from fixation. The luminous sense was diminished in
both eyes. The arterial pressure was found to be higher on the right side than on the left both in the retinal arteries and in the brachials. From this it was concluded that the ductus arteriosus was still patent. Two figures show the “holes” and the slight difference in colour of the discs.

HAROLD GRIMSDALE.


(7) The importance of these bodies is clear when we consider the frequency with which increase of their amount is accompanied by ocular change. It is advisable to know whether the vitreous contains such substances and in what amount. For this estimation, Fallica has used the method of Nassi; this depends on the transformation of phenol into tribromophenol by the addition of a solution of bromobromate of potassium. The amount of bromine left after the reaction is then measured.

The author finds the amount of volatile phenols in the vitreous to be somewhat less than in serum.

HAROLD GRIMSDALE.


(8) Rubino describes the condition of the lens in a boy aged 14 years, whose right eye had been accidently found to be defective. The anterior part of the lens was transparent but in the layer behind the embryonic nucleus there was an opacity consisting of a network of spaces filled with punctiform dots.

HAROLD GRIMSDALE.


(9) It is known that the power of regenerating limbs and organs decreases as animals rise in the scale of complexity; it is less in the verbrata than in other orders and is limited to the imperfectly developed individuals. In mammals it is limited to the healing of wounds. In larval amphibia even the eyes may be regenerated. Santoni has examined the power of regeneration of the retina in the adult frog after division of the optic nerve. He found that within 48 hours degeneration of the retina began; in a
few weeks all the retinal structures had broken down and disappeared. The first signs of regeneration appeared after some three months; the new retina seemed to spring from the region of the ciliary processes, but there were small zones of regeneration in other regions which were due to remaining pigmented epithelium or perhaps to cells migrating from the ciliary processes. In three or four weeks the whole eye was lined by a membrane of several layers, the outermost of which was made up of rods and cones. The metabolism of the retina during the process of regeneration shows a slight increase of anaerobic glycolysis; there is no appearance of aerobic glycolysis.

HAROLD GRIMSDALE.

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CORRESPONDENCE

TREATMENT OF MUSTARD GAS LESIONS OF THE EYE

To the Editors of The British Journal of Ophthalmology.

Dear Sirs—An instruction E.M.S.I. 252 (revised) on this subject has been widely distributed to the officers, consultants and hospitals of the Emergency Medical Service. It came before the Medical Board of Moorfields Eye Hospital 'for your information.' The Medical Board considered the instruction and felt that several points in it required comment.

1. The use of albucid solution is advised at First Aid Posts and at Hospitals in cases in which the eyes have been affected by gas vapour or gas splashing. It must be pointed out that the use of sulphanilamide preparations is not directed against gas contamination but only against subsequent infection of the conjunctiva and that opinion as to its efficiency in this latter respect is far from being generally favourable.

2. No mention is made in the instruction of the very diverse lesions which may be produced by gas, most of them slight and very few of them serious.

3. No indication is given of the treatment necessary when the cornea is definitely involved and while water is advised for irrigation of the eye at an incident and at First Aid Posts, no advice is given as to the lotion to be used for the irrigations recommended at Hospitals.

It would appear that this instruction is not in fact the 'result of further experience' and should be withdrawn and replaced by a