Summary

A brief analysis is presented of 130 recruits referred by Ministry of Labour medical boards for special examination of the cardiovascular system. The difficulties of the systolic murmur and borderline effort syndrome cases are considered, and attention is drawn to occasional radiological and electrocardiographical changes leading to lower grading in patients in whom the clinical signs were equivocal. I have indicated some of my views on grading, but am well aware that in many of the problems presented there is no room for dogmatism. Further, the actual grading is finally a matter not for the consultant but for the medical board.

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ALLERGIC ECZEMA AND CATARACT

BY

J. G. MILNER, F.R.C.S.

The eyes are not uncommonly involved in diseases of the skin. The lids, conjunctiva, and cornea may all become affected. Sometimes the ocular disturbance is slight—for example, a mild blepharo-conjunctivitis associated with a dry scurfy scalp—but a much more severe reaction may occur, as in the keratitis accompanying facial rosacea. In this disease there is never rosacea keratitis without facial rosacea, and although local applications in both instances are beneficial the important treatment is that of the underlying metabolic cause. If this can be suitably treated both skin and eyes improve very considerably, suggesting a common origin for the two diseases.

That the conjunctiva and superficial layers of the cornea should participate in diseases of the skin is not a matter for surprise. These structures are ectodermal in origin and would be expected to react to like stimuli. The lens is developed from surface ectoderm also, and, although its extreme modification of structure for the functions allotted to it render it a unique organ of the body, it is not illogical to expect it to respond to such stimuli as well. It could only do this, of course, by becoming opaque.

In fact, however, the lens is very rarely affected in skin disease. The majority of reported cases have been in patients suffering from neurodermatitis or scleroderma. In view of this rarity, I am prompted to report a case of anterior cataract associated—directly, I believe—with allergic eczema.

Case Report

The patient, a man aged 26, has been subject to attacks of allergic eczema for many years. Only in the last five years have the eyelids and eyebrows been affected. Other allergic manifestations have been asthma and colitis. All sorts of treatments have been tried (including x-ray applications to the face and elsewhere), and it is interesting to note that auto-haemotherapy is the only one which has given any relief. Several courses of calcium have been administered, as he is deficient in it. His father has similar allergic manifestations, but no eczema.

I first saw the patient in February, 1940, when he complained that for three months the right vision had been misty. On examination I found that there were fluffy opacities in the right lens, central in position, just beneath the anterior capsule. These opacities were accompanied by several vacuoles. Vision was 6/18 with slight correction. The left lens, except for two small vacuoles, was clear. Vision in this eye was 6/6 with a slight correction. It must here be recorded that one week later the right lens was unchanged, but the left had progressed to a state exactly resembling the right, and

vision in this eye was 6/18 also. I cannot account for this sudden and rapid increase in the left lens opacities: at the end of June there had been no further increase. Operation was not immediately advised, since, binocularly, he was able to carry on his work without much difficulty. After a few weeks, however, he found his vision varying and he was experiencing increasing discomfort while reading. Therefore, on February 28, 1940, the right lens was needed. A curette evacuation was performed the following day and he made an uneventful recovery. Vision is now 6/5 with correction.

It must be pointed out here that the dose of x rays which he had was not enough to cause an irradiation cataract. Further, the latent period was too short and, more important still, the actual appearance and position of the cataract were not such as are associated with irradiation, the features of which I have described elsewhere (Milner, 1934).

Literature

Rothmund in 1868 noted the presence of cataract associated with skin disease. Andogsky (1932) invented the term "cataracta dermatogenes" in the case of a young man with bilateral cataract and simultaneous skin eruption. Kurz (1924) reported a case of cataract associated with eczema in a girl aged 21. This patient had been given x-ray treatment, and Kurz suggested that the parathyroids may have been injured, the resulting dysfunction being responsible for the cataract. (It is not clear whether in this case there were in fact signs of parathyroid dysfunction.) Davis (1921) published the case of a girl of 15 who had a stellate cataract situated in the anterior layers of the lens and who suffered from eczema. He thought that the common origin of skin and lens correlated the two phenomena.

Daniel (1935), who quotes the above examples, demonstrated three cases. Two were in girls of 17 and the other in a man of 35. All three patients had allergic eczema and anterior cataract. Daniel suggested that the cataract changes were allergic in origin. Alan Woods, referring to Daniel's cases, suggested that in allergy the lens capsule (an ectodermal structure) participates in the general cutaneous allergic reaction and that its permeability might be altered. But, he says, there are objections to this unless it could be proved that the aqueous contains specific allergen. Woods gave it as his opinion that there was not enough evidence to warrant the term "allergic cataract."

Gronbläd (1940), referring to Rothmund's cases, says that they were probably examples of poikiloderma Jakobi, a rare skin disease which may be associated with cataract. Gronbläd also says: "Cataract has been noted in other skin diseases, but only in scleroderma and prurigo Besnier (neurodermatitis) is not uncommon." Prurigo Besnier is thought to be allergic. Thomson (quoted by Gronbläd) reported a few cases of poikiloderma Jakobi, one of which had ocular changes—myopia and optic atrophy—but no cataract. In a personal communication Thomson tells me he has never seen a case of cataract associated with eczema, although one was reported to him. Kugelberg (quoted by Gronbläd) said that the term "cataracta dermatogenes" is incorrect. The cataract is not a sequel to the cutaneous changes, but is on a par with them—i.e., "cataracta syndermatotica."

The likelihood of an underlying endocrine dysfunction in most of the types of skin disease that we have under review in this paper is stressed in the literature. Parathyroid disturbances are often found. The association of tetany (parathyroid insufficiency) and cataract is well known, and the cataract accompanying skin disease is said by some to be due to parathyroid dysfunction. This is, however, by no means certain.

Von Szily (1940) says: "Lenticular opacities are observed in those skin diseases which are presumably associated with endocrine disorders—i.e., neurodermatitis,

poikiloderma, and Darier's disease. These cataracta syndromatologica may show very variable pictures; sometimes they appear as anterior subcapsular marginal opacities, sometimes as a typical shield-like cataract, or as a uniform yellow star-like opacity in the posterior cortex."

The exact classification of eczema is not definitely settled. Some include in the term "allergic eczema" all the diseases already mentioned—neurodermatitis, poikiloderma, scleroderma, Darier's disease, etc.; but others differentiate between a local lesion—e.g., prurigo Besnier, which commonly affects the flexures—and allergic eczema, typified as a generalized rash. If this difference be admitted it will be found that very few cases of cataract have been described associated with generalized eczema.

Summary

The lens is developed from surface ectoderm, and yet very rarely is involved in skin diseases.

Cases have been reported of cataract associated with skin disease, usually neurodermatitis.

Generalized allergic eczema is not the same as neurodermatitis, and a case is reported of cataract—beginning at the age of 26—in a man subject to allergic eczema.

Most cataracts reported have similar features and are situated beneath the anterior capsule.

It has been suggested that cataract formation in these cases is due to endocrine dysfunction (probably parathyroid). There does not seem to be enough evidence to support this. It is suggested that the cataract formation is influenced by the fact that both lens and skin have a common origin from surface ectoderm. The skin is sensitized to produce an eczematous rash and the lens capsule is affected in some way. This defect in the lens capsule disturbs its metabolism and allows opacities to form in the lens subjacent to the capsule.

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X-RAY TREATMENT OF INOPERABLE CARCINOMA OF THE RECTUM WITHOUT COLOSTOMY

BY

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The chief characteristics of rectal carcinoma are the early fixation to adjacent organs, the slow rate of growth, and the absence of distant metastases until a late stage in its course has been reached. Hence a very high proportion of its victims are found to be inoperable when first examined, but these have the prospect of relatively long survival, during which their sufferings are due to the local effects of the growth, frequent action of the bowels with a sensation of incomplete evacuation, and the passage of mucus, blood, and gas—symptoms which are more a matter of discomfort and inconvenience than of pain and do not greatly impair the general health. To meet this situation it has become the established practice to relieve the rectum of the necessity of performing its function, by carrying out left inguinal colostomy even though there is no obstruction. I quote from two standard textbooks of surgery published recently:

"Left inguinal colostomy, performed before obstructive symptoms develop, makes the patient's life more tolerable

and in many instances causes temporary recession in the activity of the growth. If colostomy is withheld there is a prospect of perhaps eight or nine months of life, but often a life of misery."

"Much relief may be afforded and life prolonged by colostomy, which should not be delayed until there are symptoms of obstruction."

These statements, representative of orthodox surgical teaching, require examination. Does colostomy prolong life? Does it necessarily diminish the patient's misery? Does it retard, even temporarily, the growth of the tumour, and must it be carried out before obstruction occurs?

Does Colostomy prolong Life and lessen Suffering?

The effect on the duration of life has been investigated by Lindahl (1936), who found that among patients who had no other form of treatment the average survival of those with colostomy was 24.5 months and of those without colostomy 19.7 months, these periods dating from the onset of symptoms. Taking into account the operative mortality of 16.8% in non-obstructive cases the value of colostomy in prolonging life appears from these figures to be very doubtful. Moreover, the difference in survival of 4.8 months is largely discounted by the reasonable supposition that cases with colostomy were on the average more advanced than those without and that in some of them colostomy may have been necessary on account of obstruction. Gabriel and Lloyd-Davies (1935), whose figures show an operative mortality of 13.4%, record the survival rates of 238 cases as follows: 50% under one year, 30% under two years, 10% under three years, and 6% over three years, only one patient surviving for more than five years. The average survival is thus about eighteen months.

Does colostomy lessen suffering? Gabriel and Lloyd-Davies state that it diminishes diarrhoea, tenesmus, pain, haemorrhage, and discharge, while improving the general condition. It is true that haemorrhage and mucous discharge may be reduced, but it is equally true that they continue and cause considerable discomfort, while occasionally severe haemorrhage occurs. There is a tendency to represent colostomy life as one of comparative happiness and comfort. No doubt some patients do get on remarkably well under these conditions; but they are comparatively few, and are to be found among the more intelligent members of society and those who can afford the regular attendance of a nurse. However, for the less intelligent and poorer people, especially those living in cramped surroundings, colostomy is anything but a blessing either for the patients themselves or for those who have to live with them. Moreover, the performance of manual work is at least a matter of great difficulty. The contention sometimes advanced that patients actually get to like colostomy is answered by the eagerness of those with a temporary colostomy to have it closed as soon as possible.

Effect of Colostomy on Growth of Tumour

It is said that colostomy retards the growth of the tumour by affording rest to the rectum and by removing the irritation caused by the passage of faeces over the ulcerated surface. The continued functioning of the rectum, it is alleged, increases its blood supply, which favours the growth of the tumour. While it must be accepted that the rate of growth of a tumour is limited by its blood supply, it appears to be well founded that a tumour, through its capacity to form blood vessels and to extract a blood supply from the host, can acquire all the nourishment for its insatiable needs at its growing points. But that the nutrition available for the tumour is appreciably increased by the periodic passage of faeces