

but there is circumcorneal congestion, chiefly on the side nearest the inflammatory focus, and fading toward the fornix. A small pustule may be absorbed without coming to ulceration, but this is uncommon. From the superficial, grayish subepithelial swelling, which, losing its covering, readily heals without leaving any sign, there is every degree to the extensive, deep, yellowish infiltration, causing deep destruction of the corneal tissue, even perforation, healing slowly, generally with the assistance of vessels growing out from the conjunctiva to its edge, and only by the formation of permanent cicatricial tissue. Through this tendency to the formation of vessels on the cornea there is sometimes, when the eruption has been repeated and long continued, a sort of pannus developed. Such a pannus mostly may be distinguished by the greater irregularity of its form and distribution from trachomatous pannus, which latter almost always starts from above, while its lower edge is approximately horizontal. Seldom indeed, a sluggish, deep infiltration is complicated by hypopion and a low form of iritis. When it is borne in mind that, besides all the variations that have been indicated, a catarrhal conjunctivitis, with even considerable swelling of the membrane and mucous secretion, may be superadded, the possible diversity in the appearances presented is manifest.

The degree of injury to the eye as an organ of vision depends chiefly upon the situation of the lesion; a considerable opacity near the circumference of the cornea may be of little moment in this respect, yet, without directly interfering with the entrance of light to the pupil, it may still do harm by changing the proper curve of the cornea. The growth of vessels toward the ulceration is always a welcome manifestation, since the reparative process is hastened by their means, and it may be said in general that the perfection of recovery, the eventual freedom from opacity and changes of curvature, is the greater the nearer the ulcer is to the circumference and the shorter the time till healing is accomplished.

Of the subjective symptoms the most prominent and most troublesome is usually photophobia, so called. With an isolated eruption on the conjunctiva or a single pustule on the cornea this symptom may be but little pronounced. As a rule, however, it is present, and especially if the efflorescences are numerous and repeated does it often reach such a degree as of itself to become almost a distinguishing characteristic of the disease. A child thus affected may never open its eyes even in a moderate light for days or weeks; it buries its head in its hands, in the pillow, or in the clothes of its attendant, resisting violently any attempt to turn its face toward the light. It seems sometimes as if there were an effort to drag all the features, forehead, cheeks, lips, to one common centre and heap them up over the eyes. To some extent in accord with the amount of the photophobia is the quantity of

watery secretion poured out, which, by keeping the lids continually moistened, causes excoriations and increases the irritation. Yet it would be a mistake to suppose that the severity of the ocular affection is to be accurately gauged by the photophobia. Rarely, indeed, where this is pronounced, is the conjunctiva alone involved; there may, however, be but few pustules on the cornea and those small and near the periphery. Precisely the worst cases, those with large, sluggish infiltration, extending deeply and causing large loss of substance (dense permanent cicatrices), or perforation with its consequences, have this symptom usually but little marked.

The title scrofulous ophthalmia, though it affirms too much, yet indicates rightly the general direction in which the cause of the disease is to be sought. Not that all individuals afflicted are scrofulous, even when the most extended application is allowed to the term; many are so, and it is in such that the most serious and persistent cases are to be found, notably the sluggish form, as well as those with great blepharospasm. But a condition of health below the normal, which carries with it an impaired power of resistance to harmful influences, is always present. Exposure to rapid changes of temperature while imperfectly protected by clothing, followed by the onset or exacerbation of catarrhal inflammation of the mucous membrane of the nasal passages and fauces, too often coincides with the beginning or increase of the ocular symptoms to be denied an influence as a causative factor. The exanthemata—measles, scarlet fever—may be regarded as acting to depress the tone of the general system, while the congestion of the mucous membranes they cause, in which the conjunctiva shares, may well prepare the ground in some measure for the local affection.

To form a definite diagnosis we must obtain a view of the eye. In many cases this presents no special difficulty, in others the ingenuity and patience of the physician are taxed to the utmost if he wishes to avoid the use of forcible measures and often in vain. If the child can be coaxed to open its eyes, this is, of course, preferable; occasionally the application of cold to the lids will relieve, temporarily at least, somewhat obstinate spasm. Yet whatever means are employed they will fail in many instances, and then the only resource is the elevator of Desmarres, the child being placed on its back, and its head fixed between the knees of the operator. The use of the fingers to raise the lids in such case can never be as effective, and must produce painful and sometimes dangerous pressure on the eye.

Inspection of the eye is also necessary for the formation of our prognosis. Hesitation or mistake as to this may forfeit the confidence of the parents, a confidence often tried at the best by the persistency of the disease, and without which careful attention to the details