Nursing of Diseases of the Eye.

By Harold Grimsdale, F.R.C.S.,
Assistant Ophthalmic Surgeon, St. George's Hospital.
(Continued from p. 231.)

STATIONARY CATARACT.

We may take as a type of the stationary form the common lamellar cataract of childhood. The little patient is usually brought with a complaint of "short sight." If the child has learned to read, we may find that his distant and near vision are both defective, and cannot be raised to the normal standard by any glasses; nor does the use of a stenopaic slit or a pin-hole improve vision much.

The eyes may appear almost normal, or there may be a marked greyish reflex from the lens, showing the presence of an opacity. If questioned, the mother will not infrequently give the history that the child suffered from rickets and convulsions in infancy. When the permanent teeth are acquired, they almost always show a peculiar mal-development of the enamel. That near the base of the tooth is well formed, but at a line varying in different cases the deposit of normal enamel has almost ceased, and the tooth beyond this may not have any; or successive zones of comparatively normal and mal-developed enamel may follow each other down the tooth.

The diagnosis is, however, only to be made with certainty by the ophthalmoscope. Atropine should be instilled into the eye before examination, so that we may be able to see as much of the lens as possible through the dilated pupil. If a lamellar cataract is present, it will be noticed, when we illuminate the fundus, that the pupil does not glow equally in its whole extent, but that while the marginal region has the normal redness, the central region is somewhat grey. This greyness does not shade from the centre to the periphery, but becomes more dense as we pass from the centre until it suddenly ends in a sharp line, beyond which the reflex is often unimpaired. Sometimes, however, the marginal reflex shows streaks of opacity, radiating from the central mass.

The size of the circular opacity varies; sometimes it is as little as 3 m.m. in diameter, sometimes as much as 6 m.m. If, with the pupil dilated, we focus the light by a lens on the eye, we see these opacities stand out as greyish masses against a black background.

The nature and position of these opacities has been shown by microscopical examination; an opaque lamella surrounds a clear central nucleus, and in turn is surrounded by a clear cortex.

The radiating streaks are parts of a second incomplete opaque lamella surrounding the first.

The causation of lamellar cataract has been one of the most discussed problems of ophthalmic surgery. It has been supposed that the opaque fibres were laid down in that condition, and therefore the origin of the disease has been placed very far back in fœtal life. If this is so, its connection with rickets and convulsions in infancy, and the mal-development of the permanent teeth, can only be an accidental one; this is hardly conceivable. Certainly 75 per cent., and probably more, of all cases of lamellar cataract have faulty permanent teeth, and it is at least most probable that these two conditions have a common cause. Further, it has been observed that a baby born with normally transparent lenses has acquired lamellar cataract later.

The time of development of the teeth has been worked out with great accuracy, and it has been shown that the period of malformation of enamel begins a few months after birth and lasts for some two years. It is not at all unreasonable to suppose that the lens changes come on, in the majority of instances at least, at the same time. We have, then, to look for a common cause, on which depends the mal-development of lens and teeth, and the general disturbance, shown by the convulsions and rickets. It has been very plausibly argued that all these result from errors of feeding in infancy—that injudicious increase of carbo-hydrates, at the expense of the proper milk proteids and fats, causes mal-assimilation, and brings on all these evils which have been named. It has been pointed out, against this theory, that lamellar cataract is often hereditary, occurring in more than one generation, and often in more than one individual of the same generation in one family. This does not seem a fatal objection, especially when we consider how often the same inappropriate foods are given to all the babies of a family, according to a routine which is sanctioned by custom.

It may be assumed that a lamellar cataract is either congenital or is developed quite early in life. Once developed, there is rarely any increase in the opacity; this is why the adjective "stationary" is applied to it. Occasionally, even in childhood, however, the opacity gains in density and the vision shows a corresponding decrease, and it is by no means rare in adult life to find senile change in addition to the lamellar. The treatment of the condition varies in different cases, with the size of the opacity and with the degree of resulting defect. Where the defect is not excessive, and a useful amount of vision persists, $\frac{6}{18}$ or even $\frac{6}{24}$, we have to balance the possible advantages and disadvantage of operation and masterly inactivity. (If vision is $\frac{6}{12}$ or better the question of operation cannot be considered.) Apart from the slight risk of any operative procedure, we have to remember that if the lens is removed we deprive the patient of the power of accommodation, and (save in very exceptional cases) condemn him to wear heavy

previous page next page