ON IRITIS IN INFANCY.

By JOHN WALKER, Surgeon to the Manchester Eye Hospital.

(The substance of a paper read to the Manchester Medical Society.)

Iritis, when observed in infants, is most probably, in the majority of instances, owing to a syphilitic taint, propagated either before birth, or during the period of suckling, from the mother to the child. But it is not to be assumed that all cases are necessarily of syphilitic origin, since there is no reason why iritis should not occur independently of such a cause as well in infants as in adults. In one at least of the cases I have witnessed, there appeared to be no foundation for such an opinion.

I conceive it important that the notice of the profession should be directed to this variety of infantile ophthalmia, more especially as in two of the cases which have come under my observation, the disease was mistaken for one of a still more serious description; a mistake which had been made, no doubt, because it was not supposed that young children were subject to the affection in question. Most recent writers on ophthalmology have been particular in describing the various diseases of the eye, which are observed in infancy. The one in question, however, appears to have been nearly, if not altogether, overlooked. It certainly is not a very common affection, but occurs sufficiently often to demand the attention of practitioners. I have myself witnessed not less than half-a-dozen cases in as many years.

The symptoms of the disease in question are very different from those of the ordinary ophthalmia of infants. The conjunctiva is but slightly affected, so that there is rarely any mucous or purulent secretion observed. The sclerotic coat is generally inflamed, and hence the deep-seated and pink-coloured vessels are often numerous, and there is usually considerable intolerance of light and lachrymation. But it is principally in the iris and capsule of the lens that the more striking and characteristic symptoms are noticed: thus the colour of the iris is usually changed, its brilliancy is materially impaired, and its movements are sluggish, if not actually suspended, the pupil being usually much contracted, and sometimes of a very irregular shape. The morbid action rapidly extends to the capsule of the lens, as indicated first by a mudiness in the pupil, and subsequently by a deposit of lymph, which soon becomes organized, and is permanently adherent to the texture of the capsule.

The danger to vision in these cases will depend upon the amount of opacity of the capsule, or of the contraction of the pupil. If either of these conditions is extensive, and likely to be permanent, then an unfavourable, or at least a guarded, prognosis should be given.

In the treatment of this variety of ophthalmia, we must rely chiefly on internal remedies, and such as affect the system at large. In most cases it will be useful to apply leeches to the palpebræ in such numbers as are suitable to the age and constitution of the child. Purgatives, and in some cases even nauseants, should be freely administered in the first instance; but these must not be allowed to supersede the employment of mercury. Small doses of calomel, or of the hydrargyrum cum creta, should be adminis-

tered without delay, and continued until the progress of the disease has been arrested, or the system has been brought under the influence of this powerful agent. Belladonna should also be applied freely around the orbital region, so as, if possible, to keep the pupil in a state of expansion. In some instances an evaporating lotion may be usefully prescribed in the more acute stage of the disease, but the belladonna must be regarded as the paramount local remedy.

The following cases will serve to illustrate the foregoing remarks:—

CASE I.

Mrs. D's infant, aged seven months, residing in a suburb of Manchester, was brought to me on the 19th of December, 1838. About fourteen days previously, her mother observed some alteration in the appearance of the right eye, which excited her apprehension. The child was taken to the usual medical attendant, who gave it as his opinion that it was a case of incipient fungus, an opinion which aided materially to increase the apprehension of the parents. On examination the following appearances were noticed:—The iris, which was of a dark blue, appeared to have undergone a slight change of colour, looking somewhat duller than that of the sound eye; the pupil was much contracted and fixed, and there was a small streak of lymph deposited upon the capsule of the lens. There was no other mark of disease, not the least vascularity in any of the other tunics. When the sound eye was obscured by a bandage, she seemed to take no notice of any object, so that it was evident that vision was much impaired, if not actually destroyed in this eye. In other respects the child was healthy, and did not seem to suffer from the ocular affection. She was directed to take two grains of calomel night and morning, and to have a solution of extract of belladonna applied freely to the eye.

December 22nd. No change. To apply the extract of belladonna around the orbital region every night.

28th. The pupil was somewhat more dilated; almost the whole of the capsule exposed to view was decidedly opaque, the centre alone remaining transparent. To continue the remedies.

January 22nd, 1839. But little change was observed since last report; the opacity had extended entirely over the capsule, as far at least as it was visible, the pupil being more contracted and fixed, and the iris appeared to project towards the cornea, so as to diminish the size of the anterior chamber. To continue the extract of belladonna, and the calomel powder every other night.

March 21st. No alteration had occurred until within the last three or four days, since when there had been considerable inflammation of the external tunics, and an increase in the deposit of lymph, which was now continued on to the anterior surface of the iris, the pupil being still fixed and contracted. Ordered three leeches to be applied to the palpebræ; an evaporating lotion afterwards; castor oil occasionally, and the calomel powders night and morning.

26th. The vascularity of the external tunics had disappeared, and the lymph that had been deposited on the anterior surface of the iris, was absorbed. No other change.

No alteration in the condition of the eye was

observed after this time, the pupil remaining permanently contracted, and the capsule opaque.

CASE II.

Mary Clarke, aged six months, from Warrington, was admitted a patient of the Hospital, September 21st, 1844. The mother stated that the right eye had been inflamed about three weeks, as evinced by redness, lachrymation, and swelling of the palpebræ. Within the past week an opacity was perceived in the centre of the pupil, which alarmed the parents, and caused the medical man who attended her to express a very unfavourable opinion as to the result.

When admitted, the vessels of both conjunctiva and sclerotica were numerous and much injected; the cornea was somewhat hazy; the iris muddy, with three or four small whitish tubercles deposited on its surface; the capsule partially opaque; the pupil circular, not much contracted, and motionless. On the forehead were six or seven copper-coloured spots, about the size of a three-penny piece, which were first noticed a few days before the eye became affected. When six weeks old, the hands and feet were almost covered with similar blotches, and there were some about the arms, for which medicine was administered and the eruption disappeared.

She was ordered two leeches to the palpebræ, an evaporating lotion to be applied after the bleeding, the extract of belladonna to be smeared over the orbital region nightly, and to take internally two grains of hydrargyrum cum creta, night and morning.

25th. The inflammation had much abated; the cornea looked brighter, but there was no material change in the appearance of the iris or capsule of the lens; the pupil, however, was somewhat more dilated. The general health was somewhat impaired, and the stomach and bowels especially, considerably deranged. To continue the medicines before prescribed.

October 9th. The inflammatory action had entirely ceased; the pupil was moderately dilated and apparently fixed; the iris appeared dull, but the tubercles had disappeared from its surface; several irregular streaks of organized lymph were still observed on the capsule, and will probably be permanent. The blotches on the forehead were much diminished, the bowels more regular, and the general health better. To continue the belladonna and the mercurial powders.

Soon after this the child was taken home, and no account has been received of it since.

ON THE GENERAL CHARACTERS OF LIVING BEINGS, AND MORE ESPECIALLY OF MAN.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Having myself found great advantage from arranging subjects in a tabular form, and thinking that others may also derive benefit from a similar distinct display of characteristic features, I submit the following tables and comments to your readers.

S. A. R.

Organized Beings are distinguished from Inanimate Objects.

1. In constantly undergoing changes.
2. In having an organized structure.
3. In their mode of origin.

These three characters serve to contrast living beings with mineral matters in a very striking point of view. The first refers not only to the necessity for the supply of nourishment, and exhalation of excrement, but to the shortness and temporary nature of their duration, and their decay when life becomes extinct. These characters contrast remarkably with the *stability* of inanimate objects.

In structure the contrast is most striking between the more or less yielding solids, containing the fluids of the one, and the homogeneous nature of the other; the varying distribution of the tissues into distinct *organs* set apart for special purposes, and the *uniform* character of a mineral throughout all its parts.

Living beings again take their origin from parents like themselves; and thus, though ever decaying and passing away, others supply their places.

Animals are distinguished from Plants in having—

1. Spontaneous motions.
2. Consciousness.
3. A stomach
4. A temporary stomach in the embryo.

(The germinal membrane absorbs nourishment by its *inner* surfaces, but the cotyledons of plants by their *outer* surfaces.)

5. Chemical composition.

(The tissues of plants contain no azote, though their secretions do.)

The higher divisions of these two great kingdoms of organized beings are readily distinguished from each other: but it is the lowest and least developed beings of each that serve to connect the two, and are located with so much difficulty. Such are the zoophytes and sponges. The characters stated above, if taken *together*, will generally prove distinctive. The two first, though apparently affording very obvious contrasts between the fixed, unconscious plant, and ever-wandering animal, are the least to be depended on, and do not serve to distinguish many of the lower tribes of both kingdoms, which seem almost destitute of these characters; while many plants, (as the sensitive,) possess evident movements.

But the mode of absorbing nutriment from an *internal* cavity in animals, and from the soil by roots or the general surface in plants, *universally* prevails, and may even be distinguished in the early developments of the embryo. Again, if the tissues can be entirely freed from their secretion, and their chemical composition correctly ascertained, a very valuable distinctive character is thus obtained. The true corallines have by this means been proved to be plants; for, when freed from lime, the tissues are found to contain no azote, but in all respects to agree with those of plants, having the same composition as starch.

(To be continued.)