Movements free, R.E.—proptosed 3mm. in front of L.E. Pupils show a hemianopic type of light reaction.

Fields, R.E. A semi-circular area of vision remains in the temporal half, the boundary of which is the 20° circle. The vertical dividing line is sharply marked off, and spreads only 2° to the inner side of the fixation point.

L.E. A similar but smaller semi-circle in the temporal half, bounded by the 10° circle and the vertical meridian. X-ray shows considerable widening of sella turcica.

Diagnosis. Tumour in region of hypophysis with proliferation into right orbit through the sphenoidal fissure. Forward growth of the tumour has pushed the chiasma forwards causing damage to its front portion and lateral angles, thus producing the field changes described.

F. A. WILLIAMSON-NOBLE.

BOOK NOTICES


In the preface Mr. Alexander tells us that he has made "simplicity the primary consideration," and nothing could be simpler than his method of obtaining the formula for refraction at a single spherical surface. It is all that is required for his purpose, and deserves the highest praise. But his use of symbols is confusing: the index of refraction is denoted by the usual symbol in the figures, but in the text it is denoted by $u$, which in mathematics is used for a variable such as a velocity; if Greek letters are shunned $n$ is the symbol employed for this constant. On p. 2 the capital I is a point, the conjugate of the point O, but seven lines lower down I is the angle of incidence; small English letters $c$, $d$, and $e$ denote other angles, yet $o$, $i$, and $r$ are used for distances. There is no reason why the ordinary conventions prevalent in mathematical books should not be followed; it is usual to use Greek letters, or the first three or four English capital letters for angles, and $p$ and $q$ for the distances of the object and image to the principal plane. These points though trivial should be noted for later editions. No explanation of the difference between the first and second focal distances is given, and the number of formulae to be memorized is far too great.

It is most important to reduce this number as far as possible;
for the purposes of the greater part of this book only two are required, which are usually written:

\[ \frac{f'}{p} + \frac{f''}{q} = 1 \]

\[ \therefore q = \frac{pf''}{p - f} \text{ and } p = \frac{qf'}{q - f''} \]

\[ \frac{i}{o} = \frac{f'}{f' - b} = \frac{f'' - q}{f''} \]

where \( i \) denotes the height of the image, and \( o \) the height of the object. From this we get at once

\[ (f' - p) (f'' - q) = f' f''. \]

All distances are measured towards their appropriate principal planes; for all converging systems \( f' \) is positive, and \( f'' \) is negative (except in reflexion when \( f'' = f' \)), and vice versa for all diverging systems. The sign of \( q \) will show whether the image is on the positive or the negative side of the principal plane, and that of \( i \) will show whether the image is erect or inverted. These formulae are universally true for reflexion as well as refraction at spherical surfaces whether they be convex or concave.

The "scissors" movement seen sometimes in skiascopy is well described and its explanation is well illustrated by the figures given; indeed the last dozen pages give a far better account of paracentral shadows and other anomalies than has been published before.


Greatly aided by his artist's pencil the author, in this monograph, has at an appropriate moment promoted the progress of ophthalmology. He has lucidly summarized our knowledge of parenchymatous keratitis, and added to it not a little from the rich store of clinical observation which he has personally accumulated. We feel that this is work so well done, that by our old clinical methods little is likely to be added, and that it is well it should have been done by such an expert and at a time when the use of the Slit Lamp and the Corneal Microscope hold out good hopes that further advance in knowledge may be made; the old ground has been re-dug, not without new revelations, and fertilized so that it is now in the best condition to bear new fruit. The subject is one which has at all times been left freely in the hands of the clinician; material for examination rarely finds its way into the pathologist's laboratory. The author, after a brief historical survey, discusses the sex and age incidence, basing his observations on the records of nearly 700 cases. The greater prevalence of interstitial keratitis...
Book Notices

in females is indicated. The mode of onset is described, and it is pointed out that the preliminary stage may be much prolonged. A central form of invasion is found in 10 per cent. of cases, and may consist of an outpouring of leucocytes in the deeper corneal strata, or it is definitely endothelial with deposit of precipitates upon it—in the latter case, according to Leber, denudation of the endothelium may allow the aqueous to invade the cornea and set up cellular infiltration. Striate opacities from plication of Descemet's membrane are explained. Endothelial catarrh is described as a wave of opacity passing rapidly over the posterior surface of the cornea, and rapidly clearing.

The value and efficient use of fluorescein is described. Keratic Precipitates (k.p.) are discussed and abundantly illustrated. In the section on vascularization of the cornea the drawings show, admirably, features of great interest and diagnostic importance in all stages of development. Interstitial keratitis from acquired syphilis is recognised; the author's views as to its amenability to antispecific treatment would have been interesting; other alleged causes such as tuberculosis are reviewed by the author, who is scarcely prepared to admit them as the primary source of the corneal disorder. The influence of injury as an excitant cause is fully considered, and we are glad to see that in the present state of our knowledge it is rejected—in relation to this point, the author says "The conclusion seems inevitable; the interstitial keratitis depends on the presence in the eye of the organism of syphilis, the spirochaeta pallida, and on its readiness for evolution; if that organism be present, interstitial keratitis is practically certain to occur at some time. If the organism be present, but the required state of evolution be not reached, there will be no attack; if the required state be not reached in the two eyes simultaneously there will be an interval between the two eyes; if the state of evolution has been reached there will be an attack in the absence of any stimulus, and in spite of anything that can be done."

What is known pathologically and what has been discovered by experiment is duly set out. An interesting dissertation on the methods and value of treatment leads to the expected results. An allusion to keratitis profunda and disciform keratitis completes this valuable monograph.

Parenchymatous Keratitis. (Le Cheratiti Parenchimatose.) By Dr. Alfredo Rosica (Rome). Chieti, 1923.

This monograph on Interstitial Keratitis begins with an account of the various observations which preceded the work of Hutchinson; it gives honour to Jacob, Dixon, George Critchett and Velpeau, and quotes the account by Mackenzie of scrofulous keratitis, which showed that the main clinical features of the disease were known
long before the work of Hutchinson. There follows an account from
Hutchinson's paper in the Ophthalmic Reports of Moorfields Hospital
of the manifestations of the disease, the early haziness of the cornea,
the vascular invasion and the final resolution, together with the
masterly and convincing proof of the association of the disease with
certain peculiarities of the teeth, and with hereditary syphilis as its
cause. The conditions that may be mistaken for interstitial keratitis
are next described:—disciform, lattice, sclerosing, deep punctate,
nodosa, marginal, traumatic, striated and other forms of keratitis.

It is interesting after this long interval to recall the intense
opposition offered to the views of Hutchinson by a large section of
his confrères. At the memorable meeting of the Société de
Chirurgie in November, 1870, Hutchinson set forth, with great
wealth of proof, his demonstration of the association of interstitial
keratitis with hereditary syphilis. Panas, who was the leader of a
large band of followers, took upon himself to proclaim the anathema
of the official science of surgery against the heresy of the English
surgeon. Tantaene animis caelestibus irae.

As a statement of his own position the author says:—"I am not
extreme to the point of asserting that the interstitial keratitis of
typical form is not to be met with except in those who are infected
with hereditary syphilis, but I will not hide the fact that such is my
conviction."

From the cases, more than 100 in number, which have been
observed by him in Rome and other Italian towns, no less than
80 per cent. were due to congenital syphilis, and only two cases
could be considered traumatic.

Tubercular parenchymatous keratitis is next described; the
author considers it to be an alteration in the cornea secondary to
inflammation of the iris or ciliary body rather than a primary
affection, and much more serious in its results.

After giving an account of leprous interstitial keratitis, he passes
to malarial keratitis, describes the evidence on which it is based and
comes to the conclusion that keratitis attributed to malaria has an
appearance and course different from that of syphilitic origin, being
essentially uniocular, circumscribed and often avascular; and
generally running a more rapid course.

Influenzal keratitis has been described by various authors, but
from their description it is something quite different from true
interstitial keratitis, being either some marginal form, or a disciform
affection. The author mentions lymphatic or scrofulous keratitis,
rheumatic, reflex, dysmenorrhoeic and traumatic, and thus concludes
his survey of the literature.

Tables of statistics of various observers show the incidence of
interstitial keratitis among patients attending the eye clinics; it
varies between 0.3 and 1 per cent. The age incidence is next dealt
with, and the tables show that the age of greatest prevalence is about 15, and that there is a great preponderance of females over males in those attacked. The percentage of association with hereditary syphilis varies between 30 (Siklosoi) and 92.5 (Ayres and Bossi), and with acquired syphilis between 3 and 12.

Aetiology.—After giving at some length the views of Panas and Fournier, who considered the disease not as a direct manifestation of syphilis but simply as dyscrasic or parasyphilitic, the author passes to the evidence of the existence of the spirochaete within the cornea itself, and describes the observations of Morax, Stephenson, Gref and others, together with the experiments of Wagenmann in ligaturing the long posterior ciliary arteries and of Kester in ligaturing the venae vorticosae.

Histological reports by Virchow, Fuchs and Elschnig follow, and the author completes an excellent resumé of most of the thoughts and observations of writers from the time of Hutchinson till now. He concludes by saying: “notwithstanding diligent research and passionate discussion the question still remains for solution if interstitial keratitis is a degenerative process of trophic origin or a true manifestation of inflammation of the cornea.”

Next follow the personal observations of the author, and a series of tables gives an account of 100 cases which have been carefully recorded and studied by him in the eye clinic of Rome.

Concluding Note.—After a consideration of the clinical observations, the results of serological and experimental investigations together with an examination of the various views of the aetiology and pathology of interstitial keratitis there emerges a typical form which differs in character from all other forms of interstitial infiltration of the cornea and which is always associated with syphilis, ordinarily hereditary, but sometimes acquired. It is intrinsically an inflammation of the corneal parenchyma with the characteristic stages of infiltration, vascularization, and resolution.

W. T. Holmes Spicer.

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Obituary

Thomas Brittin Archer, 1846-1924

The late Mr. Archer was the youngest child of the late Goodwyn Archer of Ely, Cambridgeshire. He was educated at “The King’s School,” Ely, and afterwards at the Grammar School, Ipswich. He was apprenticed in 1865 to the late Richard Jones, Medical Practitioner of Woodbridge, Suffolk, and from thence completed