

SYPHILIS AND THE EYE.*

By M. FEINGOLD, M.D.,
New Orleans, La.

[A symposium, if I understand it correctly, is generally arranged in such manner that different aspects of a vital question are distributed among different men, that each one may bring out best the side of the question best known to him. If this definition be correct, I beg to preface my paper by the statement that I have purposely deviated from this ideal. It would have been necessary to dwell on a great many technical details of a, to some at least, *terra incognita*. For this reason I thought it more expedient—and endeavored to express it in the title of my paper—to draw attention to the frequency, the multiform manifestations and the importance of syphilis of the eye from two viewpoints: the often serious results and the diagnostic value of syphilitic affections of the eye.]

Of all the organs of the human body the eye holds in more than one way an exceptional position in regard to syphilis. Not only do we see on it and its appendages manifestations during all stages of acquired and hereditary syphilis, but even the remoter, so-called, post-syphilitic manifestations can often be observed. The exceptional position of the eye with regard to syphilis is further manifested by the fact that most syphilitic affections of the eye, and especially the most frequent ones, leave indelible marks behind that in after-life may be used as a diagnostic help, should the history be negative. It is not so with the skin and the mucous membranes, where the so-called secondary manifestations pass off without any permanent scars. For this reason it is of the greatest importance to the general practitioner to know certain effects of syphilis on the eye and know their diagnostic value, aside from the fact that he must be familiar with its different forms, in order that he may exert all his energies to prevent and lessen the damage to the eye by this disease.

Of all parts of the eye and its appendages hardly a single structure is exempt from some manifestation of syphilis—possibly the only exception being made by the lens, and even

this organ is claimed by some authors to show manifestations of syphilis.

It is in the nature of the origin of the so-called primary sore that it should be located on the surface, or on easily accessible parts of the body, consequently we find it on the skin of the lids, the conjunctiva of lids and eye-ball, and, according to some authors, even in the lachrymal gland and sac, and possibly the cornea.

Of the large number of extra-genital primary sores (14,590) collected by Scheuer,^{*} no less than 4.3 per cent (632) were found on the eye and lids. This already will throw considerable light on the importance of the question of syphilis of the eye.

Now, this sore may be acquired in several different ways; either by the application of saliva or the tongue to the inflamed or normal lids, or by scratching with dirty finger-nails, or, possibly, by the use of unclean instruments. The sore in this region and its accompanying bulbo present no different characteristics from those found anywhere else on the body, but the resulting scar on the lids deserves at least passing mention. As a rule, a crescentic part of the lid margin with the lashes will be gone, as if a portion of the lid margin had been punched away, thus forming a very disfiguring, but quite characteristic scar. It is a little more difficult to understand how the lachrymal gland or sac may be the seat of the primary sore, and we must assume that the spirochetæ have passed through the conjunctival sac without having set up an inflammation and then settled in these structures.

*O. Scheuer, D. *Lyphiditis d. Nuschuldigen*, 1910, page 129.

^{*}Gräfe-Saemisch, Bd. XI, I Abt., page 760.

* Read before the Southern Medical Association, Hattiesburg, Miss., November 14-17, 1911.

The so-called secondary manifestations of lues in the eye are so very frequent in some special forms, that, according to Groenouw,* from 0.8 to 6 per cent of all patients with syphilis will show manifestations of the disease in the eye in the form of iritis and cyclitis.

Of all the affections due to syphilis, iritis is by far the most frequent one, and the after effects of such an affection are, contrary to what we see of the after effects of the so-called secondary period in other organs, much more serious, because syphilitic iritis will often lead to serious interference with vision, and will, at times, even lead through increased tension to entire destruction of sight. But even in the mildest cases certain unmistakable and indelible signs will remain behind, showing in later years that an iritis had been present: the posterior synechiae. These smaller or broader attachments of the iris to the lens capsule produce an irregular pupil that can easily be seen after the slightest dilatation of the pupil, as brought about by simply shading of the eye, for instance. In this almost always present after effect of iritis and cyclitis, the general practitioner will find a valuable diagnostic help that can be utilized without much special training.

Of other secondary manifestations of syphilis we see on the lids macules and papules, and similar affections also on the conjunctiva of the eye ball. These affections heal as in the other parts of the body without any visible scars.

The so-called tertiary period, or the gummatous stage of syphilis of the eye is characterized by a kaleidoscopic multiplicity of forms. Just as the gumma may be located in the different parts of the body—the skin, bones, liver, etc., so will we find gummata in almost every portion of the eye. Scleritis, iritis and cyclitis gummosa are well known manifestations. But we also find gumma on the lids, rather frequently gummata in the periosteum at the margin of the orbit, and

at times gummatous inflammation of the periosteum in the orbit, simulating a malignant tumor within the orbit; some rare cases of gummatous affections of the optic nerve have been reported.

Like the gumma in any other part of the body, the gumma in any portion of the eye can either be entirely absorbed without leaving any visible scar behind, or it may lead to more or less extensive destruction of the affected part. Thus we see gummata of the ciliary body, iris and sclera become absorbed entirely when attacked by early treatment and leaving only comparatively harmless marks behind in the form of posterior synechiae, or marginal opacities of the cornea, or bluish discolorations of the sclera. The same manifestations will, at other times, when neglected, lead to ulceration, perforation and destruction of the eye.

Just as we see syphilis attacking the vascular system (endovasculitis syphilitica) in other parts of the body, so we find in the eye certain manifestations or* certain affections that can only be attributed to the syphilitic affection of the blood vessels in the eye. Under this head come, especially, the foci of the choroiditis we so often see, and their consequent interference with vision.

The eye does not only suffer by direct affection with syphilis, but we often find certain manifestations on the eye which can only be explained by syphilis higher up: the different forms of paralysis of the eye muscles, due to syphilitic affections of the meninges. These paralyzes often appearing in comparatively young individuals alarm and discomfort the patient considerably, but fortunately often yield to treatment very rapidly.

The optic nerve and the retina show, in a certain number of cases, manifestations of lues, and optic neuritis is one of the earlier manifestations of syphilitic infection.

Of the post-syphilitic affections of the eye, I need only mention the Argyll-Robertson pupil, the atrophy of the optic nerve of tabes, and its