V

GONOCOCCAL AND SYPHILITIC INFECTIONS OF THE EYE

Discussion

Dr. David Nabarro said all the opening contributions had been very interesting, and the one which appealed to him most was Mr. Harman's, because in the work he had to do at Great Ormond Street Children's Hospital he did not see much of gonococcal eye affections.

During the seven years he had had charge of the V.D. clinic at that hospital there had been 500 cases of congenital syphilis, and there were eighty cases of interstitial keratitis. Many of the 500 patients died in the first year, therefore the eighty cases of interstitial keratitis represented a larger proportion than would at first appear, because the age incidence of the children varied from two and a half to nine or ten. But not all his cases of interstitial keratitis had been syphilitic. The actual treatment of the eye condition was carried out by the ophthalmic surgeon to the hospital. He had asked successive ophthalmic surgeons—Mr. MacMullen and Mr. Doyne—what were their impressions concerning the value of the treatment, and they had not been enthusiastic about it, although they said the cases were not now so severe as before the arsenic treatment for interstitial keratitis was used. The speaker's own view was that the results had been extremely good, and practically all the children who had had efficient treatment had what appeared to be normal eyes, very few having any nebulæ left at all. The few cases of blindness in one or both eyes he had seen were due to choroiditis, and they were blind when they came under his observation. He felt nonplussed when he read papers by ophthalmic surgeons in which they said they did not believe in the value of arsenic for interstitial keratitis. He sometimes wondered how much treatment was given, and what doses, but he had been unable to obtain definite information on the point. He gave some of his children patients forty to forty-five injections of N.A.B., some getting a total of

10 to 12 or more grammes. He believed in treating these children until their Wassermann became negative.

An important point was that interstitial keratitis might start in children already under treatment; he had seen it start in a child whose Wassermann had become negative and who had had forty injections. In such cases the keratitis might clear up in a few weeks and leave no trace. He asked what dosages were given at the eye hospitals; were they content with one or two series of injections? Or was it intensive treatment? He strongly advocated arsenic also to prevent lesions occurring later. One could not promise that eye lesions would not appear, but one could say they would not be so severe as in those who had not had efficient treatment. He always gave the children mercury as well as injections. At Great Ormond Street he gave as a pill the green iodide of mercury with each course of six injections; then there was a month's rest, followed by a Wassermann test. Then another course of six injections and mercury pills was given, and so on.

His results were not quite in agreement with Mr. Bishop Harman's; in his cases there was no such high incidence of Hutchinsonian teeth as that gentleman found. He felt that in congenital syphilis arsenic treatment should be used very intensively, with the view of preventing lesions of the eye, and if these were not prevented entirely, the treatment would greatly lessen their severity. From his own experience he would not have thought the results of syphilitic diseases to the eyes would have been so bad as Mr. Harman's statistics showed.

Dr. FOWLER WARD said that five years ago he was struck with the mournful view of ophthalmic surgeons on interstitial keratitis. He had carefully kept notes of forty cases of the condition; thirty of them were still under observation, after five or less years. Practically all these children had improved rapidly. The earlier the children came, the less scarring they had. Where there was scarring it was in children who had not come to him until after three months. He had given two of Colonel Harrison's courses straight away each year, continuing until there was a negative Wassermann. In only one case had there been recurrence. The case-sheets of ophthalmic surgeons at Ipswich, before the clinic work was done,

showed that patients were coming up for three, four and five years with recurrent interstitial keratitis. That did not occur, practically, at Ipswich now. The only patient he had treated who had not done well was a child with a history of nine years since the onset of the disease. The Wassermann was never positive, and it was a question whether it was a syphilitic case at all. The age incidence had been four years to twenty or twenty-two. The only instance of trouble was in a child, aged three, with a mild interstitial keratitis; after three or four doses the keratitis disappeared, but the child caught a batch of toxic substance and there was dermatitis. He did not think sufficient arsenic was being given to these children. He felt inclined to keep every case of interstitial keratitis under his care for as many years as possible. The result of the treatment was so well known in Ipswich that mothers would now bring children with bad eyes to the clinic in preference to seeing an ophthalmic surgeon.

Dr. MARGARET RORKE said that, speaking as one who treated pregnant infected women, she would be bitterly disappointed if she did not get better results than those Mr. Bishop Harman mentioned. If her colleagues and herself could not reduce ophthalmia neonatorum below 12 per cent., she would think they were doing very badly.

Mr. C. MILLS said he believed that the statistics which Mr. Bishop Harman had brought forward would become classical. He would like to hear how ophthalmic surgeons definitely diagnosed recurrent gonococcal iritis from other forms of iritis; was this only arrived at by a process of elimination? He knew that Mr. Lang attributed much importance to the diagnostic value of the gelatinous exudate in the anterior chamber.

With regard to interstitial keratitis, what had been of interest to him always was the preponderance of its incidence in the congenital cases in comparison with the acquired. Most patients, before the present more efficacious routine treatment was employed, passed through a general systemic septicæmia, during which their corneæ were bombarded with spirochætes. But why did those corneæ develop interstitial keratitis so rarely? Was it possible that the cornea during the developmental stage was more susceptible to the spirochæte than was the adult avascular cornea? It was generally agreed that cases of interstitial keratitis in children did well, but

patients who developed this condition at adult age responded badly to arseno-benzol treatment. A person of twenty to thirty developing interstitial keratitis, although saturated with arseno-benzol and mercury, would have in the second eye as bad an attack as in the original one.

With regard to congenital interstitial keratitis coming on between twenty and thirty years of age, he saw many of these cases during the War. Many of them were perfect in physique, and there was present none of the associated stigmata of congenital syphilis. Usually three to five weeks later a trauma interstitial keratitis developed and the Wassermann reaction was found to be positive. There must be a considerable proportion of congenital syphilitics who went through life without showing a definite lesion of the disease. It would be valuable to know whether spirochætes lay in the corneæ of such patients, but that could only be known by sectioning many.

Dr. SHARP remarked that Mr. Hudson mentioned that the treatment of the primary focus in the prostate or vesicles by massage should be done with great circumspection, in order to prevent a flare-up. A solution of the problem might be found in the treatment described by Dr. Cumberbatch and Dr. Robinson, namely, treatment of the prostate by diathermy. That would not light up the metastasis by liberating more of the infected material into the circulation, as would massage, and would probably cause a quicker recovery from the disease. He did not remember whether Drs. Cumberbatch and Robinson treated any cases of iritis by the method.

He believed he heard Mr. Hudson say that Stephenson's line was a sign of old ophthalmia neonatorum, *i.e.*, of gonorrhœal infection; but Mr. Hudson said it was suggestive of congenital syphilis. (Mr. Hudson: If a child has had ophthalmia neonatorum it may be syphilitic.)

The PRESIDENT expressed the hope that papers of like value to those read this evening would continue to be forthcoming.

One matter which had not been touched on in the discussion was the plea put forward by Mr. Bishop Harman for ante-partum treatment of infected women. He did not think members of the Society had anything to reproach themselves with on that score; but they should stimulate those having the care of women to do a little more in

looking out for latent venereal infection. A little time ago he made inquiry as to the number of cases of venereal disease found in women who were attending certain centres, not venereal disease centres, and the amount was stated by most centres to be negligible. But at one centre where a point was made of examining every woman from that point of view, there was an extraordinarily large number. Was it because the medical officer of that centre was a crank, who saw venereal disease in every woman? He thought not, because that M.O. checked his diagnosis by bacteriological means. That should be done in other, similar centres, and he thought the result would be the same. If venereal disease were properly looked for in women and treated when found, much less would be seen of the shocking effects which Mr. Bishop Harman described.

Mr. Bishop Harman mentioned an encouraging reduction in the amount of congenital eye trouble in the second of his periods, 1913–1920. He would have liked to hear what was the figure up to 1924, as he believed there had been in these recent years a real reduction in the amount of syphilis, and the disease had been more thoroughly treated recently than in the years before the V.D. scheme came into operation. Before that time the average civilian suffering from syphilis was not treated at all adequately.

With regard to looking out for cases of venereal disease, in his own centre he had made an inquiry as to the number of women who had turned up not complaining of anything which would suggest syphilis, but in whom that disease had been discovered. Out of 280 such women, the Wassermann reaction was definitely positive in forty. That showed it was necessary to look for syphilis.

He was interested in what Mr. Hudson said about gonorrhœal ophthalmia in the adult, and the difficulty of treating it. He, the speaker, felt rather hesitant in giving an opinion about the treatment of gonorrhœal ophthalmia in the presence of ophthalmic surgeons, as his experience of it was comparatively limited; he had not seen more than thirty or forty such cases. But he had been impressed by the importance of securing drainage. Mention of slitting the outer canthus reminded him of a case at Rochester Row, which was going from bad to

worse. The eyelids were tight, and it looked as if the purulent matter was unable to get away. With blunt scissors the outer canthus was slit, and thenceforward the whole aspect of the case changed for the better.

Mr. Hudson said he thought frequent irrigation was harmful. He, Colonel Harrison, would not use perchloride of mercury, as it was an irritant in itself, also a coagulant, and would interfere with drainage. He had thought that frequent irrigation with boric lotion assisted the drainage, and so helped to get rid of the toxins.

He expressed his great appreciation for the papers contributed.

Mr. BISHOP HARMAN, in reply, said Dr. Nabarro and the second speaker took up a more hopeful view of interstitial keratitis than he could give. But he was giving the subject to the Society from a different point of view. He saw all the failures. He went once or twice a week to the London County Hall and saw a collection of the worst eye cases in London. If cases were doing favourably he might not see them. And these worst end-results which he had set out sufficed to show that cases were not all successes. Cases came from all the hospitals in London. He made himself familiar with where they had been, and he knew that they had received efficient treatment. A few reacted very well to treatment; they did so in the days before "606" was discovered. Others, despite what was done for them, showed no improvement, and the second eye went to the bad whilst treatment was in full swing. Perhaps in them the disease was more degenerative than infective. If treatment be as effective as had been suggested, why was not locomotor ataxy equally ameliorable? He saw very few cases of interstitial keratitis from the acquired disease, but congenital cases might come as late as the fortieth or the fiftieth year. The frequency of Hutchinsonian teeth proved the severity of his cases.

There was a difference in the standard of "cure." Treatment of a case by the surgeon might be regarded as a success; but when the eye surgeon saw it he found vision was only 6/60, so that he thought it a failure—since education in a blind school was needed. The difference is well shown by ophthalmia neonatorum. A medical officer of one district said they had not lost a case of ophthalmia neonatorum in a certain specified

time, and his reply to that gentleman was that he had five cases from that centre in the blind schools. These eyes had not perforated, but they were gravely damaged by their being closed during the first few weeks of life when the maculæ should develop.

Dr. Rorke misunderstood him; the figure he gave was twelve per 100,000, not 12 per cent. The casualties were practically one per 1,000 born in regard to ophthalmia neonatorum.

He gave the syphilitic children the latest arsenical treatment, and always took them into hospital at the beginning. It was important to get the cases at the earliest stage. He employed arsenic as long as there were acute symptoms; when they ceased he kept on with the mercury, varying it with iodides for a couple of years.

Mr. HUDSON, in reply, said that a common type of case was that in which a man had gonorrhœa, which persisted for some weeks. Rheumatism then developed, and shortly afterwards the first attack of iritis. Later the rheumatism was again prominent, and again iritis occurred, either in the same eye or in its fellow. The actual type of the iritis was often very suggestive, being very painful, but of a transitory character, and causing only slight damage to the eye.

What he had said about irrigation was meant as a warning against frequent irrigations with lotions which were irritating. He did not think that frequent irrigations with saline solution were so likely to be harmful.