V

THIRD-GENERATION SYPHILIS

By DR. D. NABARRO

DISCUSSION

COLONEL L. H. HARRISON said he first wished to congratulate the President very heartily on the enormous amount of work which he had put into the address, and on the able way in which he had compiled and presented the material. One could definitely say that Dr. Nabarro had proved transmission of syphilis to the third generation.

The only criticism he would make was to express some scepticism on paternal transmission. He was specially thinking of Case No. 17. In that case the sole evidence in favour of transmission to the third generation was a single positive Wassermann, not very strong, and some doubtful stigmata. Of course, if the Wassermann test had been repeated immediately afterwards, and the same result had ensued, one would have felt more confidence about it; but members knew that the Wassermann might occasionally be reported as positive when syphilis was absent. He was not casting criticism on the test, but accidents were apt to happen, and it was axiomatic that when one wished to prove a case solely on the serum reactions, a Wassermann test should be done on another specimen. Knowing the scepticism as to the possibility of paternal transmission, he would suggest that the evidence should be stronger than it was in the particular case to which he was referring. While some of the cases presented did not convince him, he admitted that others left no shadow of doubt that transmission had occurred to the third generation, but through the mother. He had seen similar cases at St. Thomas'.

Mr. DAVID LEES said he wished to join with Colonel Harrison in congratulating the President on his excellent presentation of a very difficult subject, and especially on the careful way in which he had followed up patients and their families to enable him to give accurate case-histories of the parents and grandparents of the children he had

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treated. This was an integral part of the work of those engaged in the treatment of venereal disease, and should be practised more than was the case at present. He admired Dr. Nabarro's guarded statement that the conclusions he had reached were not yet capable of scientific proof. That was a serious drawback in any work on this subject.

It was accepted that acquired syphilis was quite capable of cure in some cases, while in others its cure was very difficult. There were cases of acquired syphilis which, after cure, became re-infected at a later date. Was it not reasonable to suggest that this might also occur in congenital syphilis? Many cases of interstitial keratitis occurring at eight to ten years of age, when seen at a period ten years later may show no evidence of active syphilis, and show negative blood tests, though they have received no treatment. There was no valid reason why any such patient, after a natural or a therapeutic cure, might not acquire a fresh syphilitic infection.

He wished also to draw attention to Dr. Nabarro's statement that in many cases there was probably a latent focus of infection in the ovary. The work of Warthin and other pathologists tended to show that this was one of the few tissues in the body in which the spirochæte had not been demonstrated. If a focus in bone had been suggested, it would have been more difficult to disprove.

Dr. Nabarro had stated that more of these third generation cases should be seen in our work. While this was true, the lack of scientific proof in most cases influenced us against publishing their record. In the last few years he had met with twenty probable and six or seven possible cases. The following two cases were suggestive of third-generation syphilis: A married woman, aged twenty-three years, came to hospital a year ago with a syphilitic rash of the papulo-squamous type. No evidence was seen of a primary sore. She had very marked Hutchinsonian teeth and rhagades at the angle of the mouth. The clinical diagnosis was accepted by colleagues; the Wassermann test was strongly positive. This patient was treated very intermittently, because she lived at some distance from hospital, and found difficulty in coming for treatment. She became pregnant and was confined recently. The child had no clinical evidence of syphilis at birth, or since, but its blood shows a strong

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positive reaction by Wassermann test. There was a definite possibility of syphilis having been acquired in this patient, who had been cured of congenital syphilis. The patient's mother was dead, the father was alive, and his Wassermann test was negative. There were no sisters or brothers.

The second case was that of a woman who had been twice married. Her father died of G.P.I., and the patient had evidence of inherited syphilis, such as Hutchinsonian teeth and keratitis. By her first husband she had three healthy children. The father of the second family had no evidence of syphilis and a negative Wassermann test. The patient herself had a strongly positive Wassermann reaction, and had had two children since her second marriage; both of these children had definite evidences of congenital syphilis. This was possibly a case of third-generation syphilis, and yet it could not be denied that there was a possibility that the mother had acquired syphilis after a natural cure of her congenital condition through lapse of time or treatment.

While both these case-histories suggested third-generation syphilis, he would hesitate to make any dogmatic claim that they were. He questioned the validity of evidence, as was frequently adduced by French writers, that debility in childhood and repeated miscarriages on the part of the mother were a definite proof that her surviving children suffered from congenital syphilis.

He wished to ask the President regarding "pre-Hutchinsonian" teeth. When were they apparent prior to the development of the actual Hutchinsonian teeth, and what were their clinical characteristics? So far as his experience went, he found it difficult to be dogmatic with regard to the evidences of congenital syphilis: the prominent forehead, the flattened malar bones and other stigmata. None of these could be said to be definite proof of congenital syphilis; the clinical evidence must be something which was undoubtedly due to syphilis and to nothing else.

Another point in some of Dr. Nabarro's cases was the weak positive Wassermann result. Unless the test was repeated in these cases, possibly after provocation, and it was definitely positive, very little weight could be attached to the weak positive finding in coming to a diagnosis. This was a further reason for hesitation on his

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part to report several of these cases. Although he had spoken critically of several of the cases reported, and although he was not convinced that they were cases of third-generation syphilis, Dr. Nabarro had placed the society under a debt of gratitude for having put the subject in such an interesting way, tabulating it and presenting it in such a manner as to stimulate interest in the subject.

The investigation of cases of congenital syphilis had not been given the attention which was necessary, especially in the school medical service. In his own work it was a rarity to have a case of congenital syphilis sent to him from the school medical service, though cases which had been examined at school drifted in regularly from the eye departments of hospital. In one case glasses had been prescribed for over seven years for defective vision in a boy then aged fifteen. The clinical condition was one of well-marked *tabes dorsalis*, with loss of sight due to optic atrophy, and had quite escaped the notice of the school authorities. Serious errors such as this should not occur in a public medical service, and the meticulous care which Dr. Nabarro had shown in the examination of his material and in recording their histories was the type of work which would obviate this, and was worthy of our commendation.

Major DOBLE joined in the expressions of thanks to the President for his paper.

He agreed with the remark of Mr. Lees that the ovaries were the one part of the female in which spirochætes had never been demonstrated. Many years ago a surgical crack mentioned syphilis in the third generation, and pointed out two very prominent politicians who were examples of it.

He heard what he believed to be a true story. A child was brought who was obviously a congenital syphilitic, as also was the mother. The doctor went to the cottage where the grandmother and grandfather resided. The grandmother had just died, and when the grandfather, aged seventy, was examined, he was seen to have a peculiar rash, and he was also found to have a primary chancre!

Dr. H. M. HANSCHALL also expressed his appreciation of the value of the President's paper.

He noted with interest that in the cases recounted in detail, the fathers could be acquitted of syphilis. He was

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very doubtful of the value to be placed on all those stigmata usually held to be significant of congenital syphilis. There was the broad and prominent brow which Dr. Nabarro noted as one of the signs—well exemplified in the photographs shown of some of his lady patients. Poets had often found this feature beautiful—the tip-tilted nose, too, seemed to them like the petal of a rose; and the grim bull-dog type of face is one the English took particularly to themselves. If those features were to be put down every time to congenital syphilis, there would be many splendid congenital syphilitics, such as Socrates, Walter Scott, Thackeray, and even some distinguished men of medicine. He regretted that Dr. Nabarro had not looked out for controls in this matter—people with this facies who were free of syphilis. For example, there was the facies of the achondroplastic dwarf. Was it syphilitic?

Dr. DOROTHY LOGAN also thanked the President for his very interesting paper, and for the amount of work he had put into it.

With regard to ante-natal care, she thought that if reliance was placed on the Wassermann test only in ante-natal cases, many chances would be missed of preventing babies being born syphilitic. The negative Wassermann return in cases of pregnancy was very unreliable, so much so that if she had to send such a patient to another department in which the Wassermann might be important, the remark was often made: "*But* the patient is pregnant." One case which illustrated that very well was the only bad congenital syphilitic infant she had seen in recent years. It was at about the time that Colonel Harrison was looking for cases of congenital syphilis for his film. That child was born of a mother who was sent to her, the speaker, for treatment of her discharge during her pregnancy. She was suspected of having acquired gonorrhœa; she gave no history which pointed to syphilis. The routine Wassermann was negative. The baby was born at about full term, and it was one of the worst congenital syphilitic infants she had ever seen. An interesting point was that its Wassermann at birth was negative; the mother's became positive just after the birth. Permission was given to administer any doses of anti-syphilitic treatment short of poisonous doses, and straightway the infant began to put on weight, after the first dose of sulphostab; it fared well.

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Another case was that of a patient who was sent to her for treatment of a discharge during pregnancy, and there was a history of two or three early miscarriages. The Wassermann taken in a routine way was negative, and there was nothing about her to suggest doing anything active. Then she appeared one evening threatening to miscarry, and at the infirmary spirochaetes were found in the products of conception. Her Wassermann was taken again, and was returned as negative, and her husband's proved negative also. Subsequently she declined treatment, until she again became pregnant, and when four months pregnant she came again for treatment; she was delivered of a fine healthy baby. But again she would not persist with the treatment afterwards. However, she did come again, in another pregnancy, and again had a healthy baby. She asked obstetricians to get the products of miscarriages examined, as reliable evidence could not be obtained from the blood only, and, as this case showed, both parents could give negative Wassermanns, and yet the miscarriage could be due to syphilis.

The PRESIDENT, in reply, thanked very cordially all who had participated in the discussion on his address, also for the patient way in which he had been listened to. He quite realised when writing his paper that he was treading on very thorny ground, and was conscious that he had come short of scientifically proving the transmission of syphilis to the third generation. Still, he felt confident that such transmission did occur, and that it was so in several of the cases he had brought forward in his paper.

With regard to Colonel Harrison's remark about the child of a congenitally syphilitic father who had a moderately strong positive Wassermann, he, the speaker, was sorry no pædiatricians were included among those present, as they would have supported him and said they did not believe in a Wassermann negative if a case was clinically syphilitic. He remembered one case in a child both of whose parents were strongly Wassermann positive and yet the child had a persistently negative Wassermann, though it had obvious signs of the disease, even in the central nervous system, and it had fits. It died, but outside the hospital, and he was unable to get an autopsy.

The case referred to by Colonel Harrison was brought

to hospital at the age of five weeks on account of convulsions, wasting and a rash. The pædiatrician who saw her was convinced, clinically, that she was a congenital syphilitic, and sent her for a test, which came out a definite positive. He agreed that the test ought to have been repeated at once, but it was not always easy to get patients up a second time, especially after treatment had been started. Subsequent Wassermanns were negative. It looked as if it were a case of mild infection which had been cured by hyd. cum creta and ung. hydrarg.

He agreed with Colonel Harrison that the fathers were not so likely to convey the disease as were the mothers; but Fournier's book gave a number of alleged cases of transmission by a syphilitic father. That, in the speaker's experience, was rare.

He had not found spirochætes in ovaries of infants, but he had not examined many untreated children, and they did not often die. He had suggested the ovaries or other pelvic organs as being possible places for "carrying" the spirochætes, as several authors had recorded the presence of spirochætes in the ovaries of syphilitic fœtuses.

With regard to the case mentioned by Mr. Lees, that of a congenital syphilitic mother having a healthy family by her first husband, and an infected family by her second husband, that was very interesting, and might be due to the fact that the second husband came of a syphilitic family. In a previous paper, he (the speaker) had suggested that there might be something in the "syphilitic diathesis" of the French, *i.e.* a child might be born of syphilitic parents who, nevertheless, had not got the spirochætes actively present in its body, and so did not give the positive Wassermann. When mated to another "syphilitic" individual this suggested syphilitic diathesis might turn the scale and lead to the production of syphilitic children. Such points could only be verified, if at all, by a large amount of investigation, which must be clinical, not an inquiry by experimentation on animals.

With regard to the minor stages of Hutchinsonian teeth, he feared he had been misunderstood. He merely meant that the features mentioned were suggestive points for further investigation; he did not say they were diagnostic or pathognomonic. He considered that in some cases the syphilitic process might have produced a slighter degree of tooth defect than that which caused the

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actual Hutchinsonian teeth. He had never relied on that characteristic alone to make a diagnosis. If such defects were found, they were, or should be, an invitation to go further into the case. He had always sought confirmation from the grandparents and the collateral relatives.

In answer to Major Doble, he agreed that congenital syphilis might even be an asset to people, and might produce in them a form of genius, as in some cases Dr. Hanschell referred to. There was no need to conclude that all congenital syphilitics were necessarily feeble-minded or blind.

The fact that negro offspring of syphilitic parents did not show Hutchinsonian teeth did not constitute an argument against Hutchinsonian teeth being a sign of syphilis.

He was sure a negative Wassermann could not be regarded as conclusive against syphilis; if the syphilitic stigmata were present, even if the Wassermann was reported as negative, he would feel justified in going further into the history; one might be rewarded by finding syphilis in the family.

In answer to Dr. Dorothy Logan, Wassermann was not always negative in pregnant syphilitic women; he had found it positive in such circumstances, though not often. That was no reason why one should not examine every woman who came to the ante-natal clinics. One should not say the Wassermann was of no value, but should test the blood to see whether it was positive.

He did not expect to convince everybody of the validity of his thesis; his purpose had been to throw out suggestions, based on the cases he was able to relate in detail. As in the case of all clinical observations, he recognised it was necessary to collate a large wealth of material, and therefore he asked that members would devote as much time as they could to entering into the history of parents and grandparents. He had hinted as to collaboration of the mental hospitals; if general paralysis of the insane could be made certifiable, the investigation would perhaps be greatly helped.

It had been to him for a long time a very interesting field of work, and, as those knew who had done it, it entailed a great amount of hard work, and it was not easy, especially in these present times of stress, to get people to attend for examination and investigation. In many

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cases he had been successful, and he felt assured that this was the only way in which the investigation could be carried on.

He again thanked members for their patient and sympathetic attention.