SYPHILIS IN PREGNANCY TREATED BY PENICILLIN*

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SINCE the publication in 1943 by Mahoney[1] of the first use of penicillin in the treatment of syphilis, there have been many carefully controlled studies using this agent in practically all branches of syphilotherapy. In the field of prenatal syphilis there have been at least three reports of detailed treatment and results.[2-4] Since the total number of cases reported to date has been small, it was felt that the following should be presented.

Mrs. G., aged 27 years, was first seen when three weeks past her first missed period. She had had a left pneumothorax for three years for pulmonary tuberculosis, and was attempting a pregnancy with the consent of her physician. Since the pelvic findings were not conclusive, she was given some dietary instruction and told to return in three weeks. At the second visit the pelvic findings were more definite, and, other than her left pneumothorax, physical examination was essentially negative. A blood sample at this visit was reported Rh positive, Group O, Kahn 3 plus. On the basis of the latter a second sample was sent to a second laboratory which reported Kahn 4 plus, Kolmer strongly positive. Her husband saw his physician and was told that his blood also was 3 plus.

Lacking any other findings than positive serology, having a history of a negative Kahn at the time of the original pneumothorax, and a husband just returned from overseas service, it was felt that this was a case of an early latent syphilis. This was strengthened by the history of penicillin therapy two months before for a dermatitis. Fearing the result of heavy metal therapy upon the tuberculosis, it was suggested that we abort her to avoid a syphilitic baby. As such a course would still leave an infected mother, we decided to try penicillin first, deferring the abortion until there might be evidence of its failure. Consequently, she received 2,400,000 Oxford units of the sodium salt in eight days. Ten days later the second laboratory reported the Kolmer still strongly positive, but the Kahn had dropped to a 3 plus. Another month later the Kolmer was clearing in the fifth tube and the Kahn had dropped to 2 plus. Fetal movements were first felt at about this time.

In a discussion of the case with a dermatologist, her physician was given a very gloomy prognosis, and a second course of treatment combining heavy doses of both penicillin and mapharsen was advised. In a desperate quandary, a summary of the case was sent to Dr. John H. Stokes. His prompt reply[5] gave the opinion that the baby would be normal and that probably we had also cured the mother's syphilis. A note of caution was sounded in a subsequent communication in which attention was called to the fact[6] that the newer penicillin is much less effective against the treponema pallidum, and suggested a second and heavier course of treatment in the event that quantitative Kahns failed to show steady improvement.

Following his suggestion, seven weeks from the end of treatment, a quantitative Kahn was 4 units, while the Kolmer did not go beyond the first tube. Meanwhile the pregnancy progressed uneventfully, and two months later a completely negative quantitative serology was reported.

A living female infant weighing well over 8 lb. was delivered by low forceps at term under nitrous oxide, oxygen, and a total of two ounces of ether. The

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cord blood gave a 1 plus Kahn and a slightly positive Kolmer, but mother and baby progressed normally.

Six weeks post partum the maternal serology was negative, and one month later the baby's blood was also negative both Kahn and Kolmer. At the same time x-ray examination of three extremities showed normal bone architecture and no evidence of periosteal reaction.

A recheck of the mother's chest likewise showed no changes as a result of her pregnancy or anesthesia.

While continued observation has been advised, it now seems quite probable that both mother and baby are free of syphilis.

References

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