## ON THE

TRANSMISSION OF SECONDARY SYPHILIS FROM THE MALE PARENT TO THE FŒTUS IN UTERO,

AND THE

SUBSEQUENT INFECTION OF THE MOTHER THROUGH THE MEDIUM OF THE FŒTAL CIRCULATION.

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In bringing before the Society a few cases bearing chiefly on the transmissibility of secondary syphilis to the fœtus in utero, from the male parent, I cannot pretend to offer anything novel, or to claim any interest beyond that which attaches to a very important subject; but I trust I may elicit the experience of the Fellows of the Society, many of whom have without doubt seen cases similar to those about to be described.

When we consider the length of time during which syphilis remains in the constitution after it has once passed into the secondary form, the Protean shapes it may assume, and the great difficulties which attend any attempt to trace the moral histories of individual cases, it is not surprising that great discrepancies of opinion should exist respecting the transmissibility of constitutional syphilis. After John Hunter, the greatest name in syphilis is undoubtedly that of M. Ricord. I believe I may briefly state the doctrines of this indefatigable observer to be as follows:—

He believes that when the primary poison is taken, it remains during several days in a state of incubation, during which time the poison may be destroyed, without any danger of the subsequent occurrence of constitutional disease. That after this time chances take on certain characters, and infect the whole constitution, giving rise to the train of evils known as constitutional syphilis. He does not believe that a sore or chance, capable of communicating syphilis by inoculation, can ever arise as a secondary symptom. He believes that for the presence of constitutional symptoms it is absolutely necessary that a primary sore should have pre-existed, except under two conditions—namely, that a man suffering from constitutional syphilis may impregnate a healthy woman, and the germ may, in the first place, have constitutional syphilis, and, in the second, communicate it to the mother, without the existence of any primary disease in either mother or child. Here, I believe, syphilitic contagion stops, in the opinion of Ricord. He does not believe in the communication of syphilis by the secretions, or by the discharges from secondary eruptions or sores. Nor does he believe that a child affected with secondary syphilis can communicate the disease to a healthy nurse, or

that a nurse affected with constitutional syphilis can convey the disease to a healthy infant through the medium of the milk.

Other French writers, and authorities upon the subject in this country, assert, on the contrary, that a man or woman having secondary syphilis may communicate it during intercourse in a direct manner; that a child having congenital or secondary syphilis, may infect its nurse in the act of sucking, the nurse having been previously free from the disease; that the nurse, thus diseased, may become a medium of infection to others; that an infected woman, suffering from secondary syphilis only, may infect a healthy child, through the milk. These are the views held by Dr. Whitehead, in his work on "Hereditary Diseases," published in 1851, and by Mr. E. Wilson, in his work on "Syphilis," published in 1852. Mr. Wilson goes so far as to assert the identity of gonorrhœa and syphilis, and he is of opinion that all the results of a chancre may follow upon a gonorrhœa in which no urethral chancre existed. Cases are given which appear to warrant these views, but the whole question of the transmission of secondary disease is in such an unsettled state that no apology can be needed for introducing it in a Society like the present. The following cases bear upon some of the points in dispute, and it will be impossible for any one who pays attention to this subject not to acknowledge, that it is one whose importance, both as regards medical science and the physical degeneration of mankind, is much underrated or overlooked.

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Case I.—The following case came under my observation at St. Mary's Hospital, and I was as careful as possible in tracing

its history:-

, a healthy young woman, married a cabman in 1842. She had successively three children, all of whom are living and in excellent health. No spot or blemish has ever been observed upon them. For some time she remained without becoming pregnant, but in December, 1850, her fourth child was born. This child, shortly after its birth, had red spots upon its face and neck, and an eruption upon the buttocks. The child also had a profuse secretion from the nose. It died of what was called bronchitis, at the age of seven weeks and some days. She again became pregnant in 1852, and gave birth to a fifth child, which, like the preceding child, appeared healthy at the time of its birth. In April, 1852, this child was brought to me, and certainly presented one of the most wretched spectacles I ever beheld. The child had remained healthy until it was three months and a half old, when it got hooping-cough; a month afterwards it was brought to the hospital. Its eyes and mouth were surrounded by deep rings of coagulated blood, and its ears and nostrils were plugged with coagula; blood had also been lost by the bowels. All with coagula; blood had also been lost by the bowels. All these orifices, mouth, nares, ears, eyes, and anus, had bled for some days every time the child had had a fit of coughing. It was scarcely living when I saw it; the pulse was almost impropriently the face and confect of the contract of the cont perceptible; the face and surface of the body were blanched from loss of blood; it appeared insensible. I ordered the child to be put in a milk bath, and to have broth enemata, but I heard that convulsions came on shortly afterwards, and soon ended in death. In signing the certificate of this child's death. I returned it as dying of convulsion consequent upon hoopingcough, and loss of blood. I had then no suspicion whatever of syphilis, as nothing was said about the death of the former

In the month of March, 1853, the same woman brought me a child, born in December, 1852, about whose condition there could be no mistake. Its buttocks were covered by large erythematous patches in a state of ulceration; the scrotum looked as if it had been covered with yellow varnish; the mouth and nostrils were fissured; the eyelids gummy; and the mucous membrane of both eye and nose secreting a profuse gummy matter; the inside of the lips and the surface of the tongue were aphthous; the cheeks were varnished and wrinkled. This condition of the child had come on gradually about a month previously, before this it had appeared healthy. The mother herself had never had any eruption, sore-throat, catamenial irregularity, leucorrheea, or any symptom which, on the most minute inquiry gave evidence of the presence of the syphilitic poison. During the whole of her married life she had not been conscious of any change in her health. I saw the husband of this woman, and he admitted that five years ago he had an outbreak of secondary syphilis, the primary disease having occurred four or five years before. He then became an out-patient at the Lock Hospital, and was mercurialized. During the presence of the secondary disease he avoided intercourse with his wife, and was confident that he did not communicate the disease to her. He had severe sore-

throat, and a copper-coloured eruption. When I saw him the only signs of disease were a few acne upon his forehead, and he declared that nothing more than this had appeared upon him for the last two or three years. The wife has, at the present time, a mammary abscess, but she has had abscesses while suckling the last four of her children.

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In this case, if the statement of the man can be relied upon, the syphilitic poison remained in abeyance during the first five years of his marriage, and the children born during this were not affected. After this, two children were destroyed, and a third poisoned, with syphilis. This woman, it will be observed, never aborted. Can the mammary abscesses in this woman be referred to syphilis? It certainly appears as though the poison in this case affected the children without influencing the

constitution of the mother.

Case 2.—A woman applied during the course of last year at St. Mary's Hospital, with a nurse-child which she was suckling, and she also suckled at the same time a child of her own. The nurse child was four months old. The skin of its face was like yellow tissue-paper; its nostrils and eyes were secreting an abundance of gummy mucus and pus, and the nates and scrotum were covered with erythematous patches in a state of ulceration. Numerous blotches appeared on other parts of the body. The mouth and anus were deeply fissured, and the child's mouth bled every time it took the breast. The woman applied both children to either breast without reservation. When I first saw the diseased child, she had suckled it about a month. The woman herself, and her own child, were at this time free from any obvious signs of disease. The nipples were healthy, although the discharges from the nurse-child's mouth were so acrid, that on the spots where it sucked its own fingers erythema and ulceration ensued. The nature of the case being evident, the woman was cautioned not to apply her own child to the same breast with the nurse-child, and the case was narrowly watched, during treatment, for upwards of three months. In answer to the first inquiries on the subject, it was stated that the father of the diseased child had last year been an outpatient at the hospital, under the care of Mr. Spencer Smith; and on referring to the hospital registration books, I found he had been treated for an eruption of the leg, which was set down as "probably syphilitic."

The man himself, on being examined, gave me the following account of himself:—He had contracted syphilis in 1849; a chancre appeared on the foreskin, and remained there three weeks. It was followed by an inguinal bubo. For these symptoms mercury was given him, but he was not salivated. He, however, became apparently well under its use. Last year, he got his fellow-servant with child, and married her when she was large in the family way. The child—the diseased nurse-child already referred to—was born in January, 1853. From the time of the chancre up to the time immediately previous to that at which his wife fell pregnant he had observed no signs of any secondary affection. But just before this he had lost his situation, that of a butler, and, faring worse than usual, he became out of health. His hair now fell off; he had no sore-throat, but the eruption appeared on his legs, for which he was treated by my colleague, Mr. Henry Smith, and he had a scaly, coppercoloured eruption on his forehead, which became very distinct after eating and drinking. He also suffered at intervals from

severe rheumatic pains.

The wife remained in apparently good health. She was confined, I believe, in Queen Charlotte's Lying-in Hospital, and was subsequently recommended by Dr. M. Babington as wetnurse to a lady living in the country. The husband is in constant communication with his wife, and states that she has given satisfaction as a nurse, and is in perfect health, with the exception that she menstruates somewhat profusely, and oftener than natural. It has not been hidden from the lady whose child the woman is suckling that the nurse's own child had fallen into had health

fallen into bad health.

It became, of course, a very interesting question to determine, as far as possible, whether the diseased child would communicate secondary syphilis to its foster-nurse, and whether the foster-nurse would communicate the disease to her own child or her husband, and also to ascertain whether the mother of the diseased child could communicate constitutional syphilis to her foster-child. Here was a case in which secondary syphilis might have at once been communicated to at least four persons, besides the parents of the diseased child and the child itself, if we recognise the transmission of constitutional syphilis through the medium of the secretions. In all, six persons were exposed to the danger of syphilis by the intercourse of the father of the diseased child with his fellow-servant. As far as this case goes to the present time, and I have now had it under

my observation nearly four months, it tells against the communication of secondary syphilis from one person to another, either by means of the matter from secondary sores, or the secretions of a person suffering from secondary syphilis

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Some time after the child had been under treatment, its foster-nurse had two or three pimples upon her neck, between the breasts; but she stated she had had the same kind of pimples before she began to nurse the foster-child. When she began to confine the diseased child to one nipple, that nipple became sore, and a large serpentine ulcer formed upon it. The ulceration had not, however, the yellow base or other appearances of a syphilitic sore, and three times I performed inoculation with matter taken from this sore, without any effect. The woman has had no signs of secondary disease in any other part of the body, and is as well as a woman could be expected to be who was suckling two children. Her own child is perfectly free from all signs of disease, and so is her husband, at the present time. I have purposely limited the treatment to the diseased child itself, so that I might observe the condition of the nurse.

The state of the mother of the diseased child is perhaps suspicious, as menorrhagic losses are among the most common signs of secondary syphilis in the female; but still it is extremely frequent in wet nurses who menstruate during lactation. I have seen Dr. Babington, and cannot learn that the child shows any signs of disease. It is fat and healthy, and although the suspicions of the mother have been excited, she appears perfectly satisfied with the health of the nurse. Thus, as far as this case goes, the syphilized father begot a diseased child. The mother suffered slightly, if at all—probably not at all—and has not communicated disease to her foster-child. The syphilized child has not communicated disease to its foster mother and father, or to its foster-brother, though it would be difficult to conceive a mouth in a more aggravated state of disease than was the mouth of this child when I first saw it. The eruption and other signs of disease were relieved by grey powder, a mercurial girdle, the iodide of potassium, and cod-liver oil.

These cases show the amount of disease which may follow marriages in which the husband has had syphilis previously, and in which even slight signs of the disease remains in his constitution.

I have also arrived at the conclusion, that where the placenta and membranes become so diseased as to cause abortion, the child remaining free from disease, the mother is pretty sure to be affected with the disease; but when the child is born living, and is apparently healthy at the time of birth, the mother may in some cases escape contagion. When the children are born healthy, the eruption generally comes on a few weeks after birth, and is probably excited by the alternations of temperature, and the irregularities of nutrition to which the infant is exposed after birth, as compared with that of the fœtus in utero. Probably in some infants born of healthy mothers and syphilized fathers, the eruption may not appear until long after birth; at least, I have seen cases which seemed to warrant such a conclusion. When the ovum is affected by secondary syphilitic disease, we can easily understand that the blood of the fœtus should infect the mother through the placenta. By pregnancy, through the medium of the blood of the ovum, the blood of the male parent is, as it were, positively transfused into the blood of the female. There can be doubt, I think, that in practice, in all cases of repeated abortion, and eruptions in the early months of infancy, the health of the male parent before marriage should be strictly inquired into.

With respect to the contagiousness of secondary sores, it appears on me to be at present an undecided question, but I have not seen a case in which it could have been pronounced with certainty that a secondary malady was communicated from one person to another by intercourse without the presence of primary sores. I might have added many other cases, but those I have related are two of the most interesting which have come under my own observation, and in which I was able personally to verify most of the facts relating to them. Not the least important of the results, as I have observed them, is the frequency of leucorrhœa as a leading symptom of secondary disease when communicated to the mother by the ovum.