On Syphilitic Infants

Robert Fouler

Heogron - Pecilng on the orifes
Skins - Hee particularly mentioed

No anatomiak Fails

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On Syphilis Infantum.

Knowing full well that the main object which ought to be kept in view in composing a dissertation for the purpose for which this is intended, is that the subject treated of should embrace the original observations and contain as much as possible the preconceived ideas of the writer. I have chosen Syphilis Infantum for my Thesis for having served one month as Clinical Clerk to Dr. Farre, Physician for the Diseases of women and children at King's College Hospital London, I had ample opportunities of becoming acquainted with this disease.

The importance of my subject may perhaps be gathered from the fact that during my six months clinical clerkship between 20 and 30 cases were brought to the Hospital as outpatients under Dr. Farre presenting the symptoms of this disease. Independent of this circumstance it becomes especially the duty of every young practitioner in Medicine to be well acquainted with the chara-
acters and diagnosis of this affection, not only for his own sake, but also for that of his patients. For of all diseases requiring delicacy of management in their investigation, I consider this stands preeminent—because if a medical man depends on forming his opinion and diagnosis of this malady from enquiries having a tendency to trace the cause of it to the former frailty of the parents, he will most assuredly frequently rely upon a very sandy foundation; he will either, from his unpleasant and probably so considered un-called for eulogious, lose an instructive case and perhaps a profitable patient; or by his reliance upon the negative answers to his enquiries he will materially endanger the life of the child. Again what inconvenience and distress a practitioner would produce were he, being ignorant of the nature of the disease, to permit an infant with syphilic ulcers about its mouth to suckle the healthy breast of a strange nurse. I have mentioned the term "former frailty of the parents" but in due deference to our dear think from what I have read and from no
Hearing amongst the Hospital outpatients the
real unformed expression of surprise displayed on the Mother's countenance when told
that her child is suffering from a disease in the
blood" (a term used by this class of persons to
designate the constitutional effects of Syphilis) from
these circumstances I consider that the major-
ity of syphilitic infants owe their affliction
to the former frailty of their fathers. However,
I am happy to add that among the higher
classes of society this disease becomes of
much rarer occurrence, and I think we
can trace the reason of it to this cause—
cultivation of the mind seems to tell a man
that besides his present enjoyment there are
other graver consequences and effects to be
considered when he undertakes to fulfill that
great precept "Increase and Multiply"; and I
know that among the educated class of So-ci-
ety most of the young men who have during
"single blessedness" ever been affected with the
venereal poison, do not think of tying the
marriage knot before they have been assured
by their medical attendant of the safety of
their intentions.
Although the fætabis is most usually contaminated while still in the womb of its mother, yet this is not the only way of its contracting the disease; for the infection may be communicated to the sucking infant from the ulcerated nipple of a diseased nurse, and in this instance aphthous ulcers will first form in the mouth of the child which are subsequently followed by the other symptoms of the disease; again, though more rarely, it may be infected during its passage into this world by the existence of a primary sore in the genita of the mother: probably, however, from this latter cause the venereal cancer, as has been supposed, often forms an efficient protective covering.

Some authors have supposed that the infant could only be infected by coming in contact during parturition with ulcers in the vagina of the mother; this doctrine is at once overthrown by the following facts: 1st, by having ascertained by observation that no such ulcers were in existence at the period of parturition; and 2ndly, that many infants have exhibited the symptoms of the disease actually
existing at the moment of their birth.

To contaminate the fetus in utero it is generally admitted that if the mother is labouring under secondary syphilis during gestation she may transmit it to her offspring—but there is a great difference of opinion as to the possibility of the fetus being infected by the father. Some affirm that to convey contamination he must have primary sores on the genitals—others on the contrary maintain that it will suffice to produce an infected fetus provided the secondary sores of the disease still lurk in the father's system, even though he is free from any external marks of syphilis whatever at the time of the conception. To this latter view I entirely agree, and some from this doctrine argue that a newly married man, who is himself free from every appearance of syphilis and every other disease, may yet infect his wife in such a manner that secondary symptoms shall appear in her in a few months after marriage, without her having conceived, and these not preceded by any primary symptoms, or by any discharge whatever from the genitals.
Picord however denies that the two then ever received the infection from the father; or that she can transmit the aëthesis to her offspring except she has been subjected to the contagion of primary sores, and she herself has had an indurated chancre as well as secondary syphilitic symptoms consequent upon such chancre.

If a perfectly healthy mother conceive of a perfectly healthy father can the diathermia subsequent to her be transmitted to the child? Picord answers this with a decided negative and says: "It is absurd to think that the father can contaminate the fetus through the membranes: a fetus however in such a case may inherit the diathesis of the mother provided she has (subsequent to its conception) become affected with an indurated chancre and all its consequences; but we unfortunately do not know what is the latest period of pregnancy in which a woman, who happens to take the disease can contaminate her offspring."

It is extremely doubtful and problematical
whether the nurse can infect the child simply by lactation — in fact I have not been able to meet with an instance of this sort either in St. A. Faze's Hospital practice or in the works of the various authorities on this subject.碧cord in speaking of these supplications cases says "But who can warrant that they were not the result of heredity? Who could venture to say that he knew everything about the parents' antecedent state of health? and who could assert that the nurse was not herself suffering from a primary - ulcer, which had been the means of creating a small one of the same nature in some part or other of the body of the child where it had remained unnoticed." It is however generally admitted that, if a syphilitic nurse having ulceration of the nipple, the child may be infected. There are cases indeed on record which show that a dry nurse, if labouring under Syphilis, may infect an infant committed to her care; and certainly such cases would seem to afford a proof of secondary symptoms being capable of propagating the venereal disease.
Mr. Colles, details a case of a woman on whom "a syphilitic scaly eruption came out all over the body, preceded by pains in the bones, palpitations of the heart, loss of appetite, nausea and thirst," and in whose bed a child one year and a half old, used to sleep and who was subsequently brought to him with superficial coppery ulcerations about the mouth. In this case he says "no suspicion whatever arose that the disease of the child had been derived from the parents; indeed, the advanced age of the child at the time it first exhibited any signs of the disease was quite sufficient to remove all doubt or suspicion as to that head."

It is established that a syphilitic infant, if it has ulceration of the lips, may contaminate its healthy nurse. Now it is important to know that the possibility of transmission of the disease from parents to child lasts as long as the secondary ulcerations exist in either of them; but that, when the tertiary manifestations begin to appear, the disease, says Poids,
is no longer transmissible; the children are then born with another disposition—
big the strophulosis.
Ricord and others from numerous experiments have found it impossible to
produce the characteristic fungul e
lymphation with the madder of a sec-
ondary ulcer—however, other authors
have affirmed just the reverse and sever-
al cases have at various times been re-
corded to prove that primary can be
produced by secondary sores: for instance,
the nurses infected by syphilitic infants
are said to have among their other symp-
toms a greater or smaller number of
small raspberry-like moist raised
excrescences, or, as some term them,
wheels on the pudenda and inside of
the top of the thighs—whilst their hus-
bands contaminated by them contract
regular chancreas upon their genitals.
The experiments of Ricord were from
his own conception, made on the indi-
viduals who themselves laboured un-
der the syphilitic symptoms, and the
results we should certainly have expected, as from McColle's remark, "a person already affected with secondary syphilis will not receive fresh inoculation from another secondary ulcer, although a healthy person might be contaminated;" and from the following assertion: "That the contagion of syphilis seems to possess a certain degree of protective power against the same disease; and that if an infected person be inoculated with the virus, he is much less likely to take the disease than a healthy uninfected person."

On the same rationale may also be explained another observation of McColle, which has more reference to my immediate subject, viz.: "That he has never seen or heard of a single instance in which a syphilitic infant (although its month be ulcerated) inoculated by its own mother, had produced ulceration of her breasts; whereas very few instances have occurred where a syphilitic infant had not infected a strange hired wet nurse, and who had previously been
in good health."

"Yphilitis infantum is regarded by Mr. Gollner as equally infectious as smallpox, and he tells us that in his practice whole families have become contaminated from one child, either from the mere contact of nursing and dressing it, or from sleeping in the same bed with it; or from the use of the same cup or spoon and drinking vessel used by the infected child. Some authors also affirm that the yphilitic taint of the offspring of a second husband may be derived from the influence of the first husband on the mother, in the same way as we see external form and appearance similarly perpetuated for a time not only among the lower animals, but even in man himself; of which the following are a few of the examples on record:—

(a) When the Earl of Morton’s Arabian mare was covered by the quagga, not only did the mule so begotten partake of the character of the sire, but when the mare was subsequently submitted to an Arabian stallion, by whom she had three foals at
different times, the first two continued to exhibit some of the distinctive peculiarities of the quagga, conjoined with the characters of the Arabian breed.

(3) It is a fact well known among dealers that the traces of the lati always remain in the produce of a mare which has ever been covered by a stallion.

(4) Dr. Mayo mentions that a similar occurrence was observed by Mr. Giles in a litter of pigs which resembled in colour a former litter by a wild boar.

(5) Instances have been known of Creole women who, having had a child by a white man, afterwards became impregnated by a black man, and in whom the child of the latter father bore a very great resemblance in form and general appearance to the former child of the white father.

In explanation of these occurrences three hypotheses have been at different times advanced:

1st That a permanent influence is exerted on all the ova of the female by the seminal fluid of the first male, which is—
Influence continues to manifest itself in the offspring of subsequent conceptions, when impression has been affected by a perfectly healthy man.

2d. That the constitution of the mother becomes assimilated, as it were, to the constitution of the first husband through the influence of his conception, and that she therefore becomes actually inoculated through her offspring with the peculiarities or even the taint of her first husband.

3d. That the similarity to the taint of the first observed in the offspring of the second husband is produced through the influence of the imagination of the mother. The first hypothesis seems to me the most satisfactory to explain the transmission of the constitutional disease of one father to the taint of a second, and is I believe supported by the authorities of Dr. Henderson, Dr. Montgomery and Dr. Frischer.

The objections to the second theory are that experiments have shown that in the human subject, as in Mammalia, there is no passage of blood from the vessels of the
Mother into those of the fetus and vice versa: for when the placenta is injected from either the vessels of the mother or from the umbilical arteries or veins, as can be readily done, only the vessels of the maternal or fetal portion of the placenta are respectively filled in each case. These results however might have been anticipated when we consider the anatomy of the connection between the vascular system of the mother and that of the fetus as promulgated by Weber, viz.: "That the extremely thin parietes of the uterine arteries and veins (which on entering the spongy substance of the placenta no longer ramify and give off branches and loops, but take the form of a network) apply themselves to all the branches and capillary loops of the vessels which form the fetal villi, so that even here the structure consists essentially in two sets of vessels being brought into the closest possible contact."

But in answer to this objection it must not be forgotten that these experiments of injecting the placenta were suddenly per-
formed, whilst that the process of gestation goes on for months, in which period if this hypothesis be correct, ample time is given for the experiments of nature and for the transmission of this influence or taint during those subtle interchanges which we know to occur between the elements of the blood of the mother and that of the foetus in utero. Although not actually bearing on the subject of the offspring of the second becoming affected with any peculiarity or taint of the first husband, still the following opinion of Dr. Boerhaave in reference to the communicability of Syphilis seems evidently to be in favour of this hypothesis:

"It is the generally received opinion that syphilis in its secondary stage is not communicable directly to either sex from the other; that the disease is not propagated unless there exists an open chancre and this accords with myobservation. But it appears to me probable that if a previously healthy woman conceive of an ovum tainted by syphilis, the virus derived from its father, her system
may become inoculated during the progress of gestation, in consequence of the close vascular connection existing between it and herself; for it has fallen to my lot to see more than one case, in which a young woman united to a man labouring under obstrinate secondary symptoms remained healthy for some months after marriage, but became the subject of the same disease in its secondary form some time after impregnation had taken place; and I have considered that in such a case the mother derived the disease not directly from the father, but from the affected foetus which she carried in her womb. "M'Nicol is of the same opinion for he says: "That there is no such thing as an infection of the child by the mother, she having been contaminated by the constitutional diathesis of the father; but that the husband procreates an infected child, which may then propagate the secondary poison to the mother; for where there are no children the mother does not suffer." He also affirms that if after the conception of the first foetus
The mother becomes infected by a second fetus (in a case of superimposition) derived from a father in whom the diathesis had subsequently arisen—that she might perhaps transmit the diathesis to the first fetus which had been conceived when both she and her husband were perfectly healthy.

As regards the third hypothesis it may be stated generally that the influence of the imagination can hardly be strained to the production of such constitutional diseases as syphilis, although there can be no doubt, as shown by the following example, that the imagination of the mother has, even in the lower animals, a very strong effect in transmitting external resemblances to her offspring:—A very valuable setter bitch, when in heat, became very much attached to a male ugly cur, which however was not permitted to come near her; yet so strongly attached was the to this dog that, when some time after, she was submitted to a dog of a pure breed, the whelps which she produced from this inco-
-pregnancy bore distinct marks of very great resemblance to those of her old same theory. Various authors have noticed the effects produced on the fetus in utero on account of the extreme impenetrability of the nervous system in pregnant women: Morgagni tells us "if a certain woman in the fourth month of her pregnancy, and just entering upon the fifth, when news was suddenly brought to her of the instant death of her absent husband; being struck with grief and fear at the same moment, she, from that very time, at first observed the motion of the fetus to be made more languid, and after that to cease entirely. And at the end of the eighth day after the ceased to feel the child's motion, she mis-carried."

Esquirol is led from observation and experience to refer one of the species of congenital predisposition to insanity to the impression of terror on the mind of the mother while pregnant.

Montgomery also tells us of a lady pregnant for the first time who, from seeing a man who used to crawl along the flag-way on
his hands and knees, with his feet turned up behind him, which latter were malformed and imperfect appearing as if they had been cut off at the instep, brought forth a child a month before its time which lived but a few minutes and which although in every other respect perfect, had the feet malformed and defective precisely in the same way as those of the cripple who had alarmed her. Therefore without advocating the indiscriminate doctrine of effects produced by the mother's imagination, or the ridiculous absurd fabrications by which it has been attempted to maintain it we must, although we cannot reconcile the hypothesis of such constitutional diseases as Syphilis being thus produced, consider it quite consistent with reason and the present state of our knowledge, to believe that a very powerful impression on the mother's mind or nervous system may unreasonably affect the fetus, and it will at least be always safe and prudent to act on such presumption and not to permit pregnant women to see disgusting
objects, for although no injury may be thereby done to the child, their minds are apt to become much troubled with anticipations of some deformity or disfigurement likely to ensue.

The history of a case of Syphilitic jaundice is generally as follows: if the mother has previously conceived we shall generally find that she has had other children seriously affected, has also suffered from one or two miscarriages, and has perhaps had one or two still-births—the fetus having been dead in utero for a few weeks. As I have never seen one of these dead fetuses, I can only delineate their appearance from toto: it is said that the body is often so putrid as to prevent us recognising any marks except those of decomposition; sometimes however we may see copper-coloured blotches, but more usually there is merely a desquamation of the cuticle, whilst the nails may be found not to be formed, and in general the child appears as if it had been badly nourished. Every obstetric practitioner must know
ever be aware that the mere fact of a woman bringing forth a dead putrid child will not justify any reflections upon the parents' morality; if however we can obtain a syphilitic history, or if any unfortunate living production thereafter shows any symptoms of Syphilis, then, without a doubt, our suspicions will be justly excited.

One or two diseased infants have been brought to King's College Hospital where their mothers had previously borne a healthy family, had never miscarried, nor had ever had a still-birth— these cases I consider are to be attributed to one or other of the parents having, after the last previous conception, become infected with Syphilis from an unlawful connection with a diseased party. Sometimes the child when produced alive and bearing unequivocal marks of the venereal disease, is in such a weakly and emaciated state that it does not survive more than a few hours. Dr. Currell in his "Contributions to Path
logy, Therapeutics, and Forensic Medicine" mentions that Chief Physician to the Foundling Hospital at Lyons, affirms "that it is extremely rare for this disease to manifest itself at birth by evident signs," and that Christofori, Physician to the Foundling Hospital at Bologna, never saw a single instance in which a newly born infant was admitted with the disease unquestionably developed.

In the very great majority of the cases I have seen, the symptoms have come on in a few weeks after birth, generally about the fifth — the third week has been the earliest period — of those cases brought to King's College Hospital during the time I was Clinical Clerk. The time of their appearance however is said to be very uncertain varying from a fortnight to five or six months after birth; but in the following instructive case, communicated to me by a friend as having occurred to him some time back at the Bristol General Hospital, the characteristic marks seem to have.
appeared much earlier. He attended a young healthy woman during her first confinement; the child was born at the full period, was healthy looking, and was not smaller than first children generally are. On the second day after its birth it was attacked with a slight watering from the eyes, which led him to suspect that it was "sickening" for the measles—however on the next day a distinct coppery discoloration of the skin commenced on the face, and gradually spread to the trunk and extremities; the eruption was not above the level of the cuticle and did not become scaly. On enquiry both parents stoutly denied ever having had typhoid, this however did not mislead him either as to his diagnosis or his treatment and he accordingly gave .j of Hydric Creta every night, and with manifest adv-

antage to his patient. Not feeling sat-

ified with his opinion the parents took the child some miles to consult another medical man, and in conse-
quence of this exposure to cold the child caught an attack of pneumonia and died, after being slightly convulsed, on the 11th day after its birth. I consider the features of this case to be both instructive and important for the following reasons: 1stly on account of the early period after birth at which the symptoms commenced; for if the child is not born with the eruption, I believe the general opinion of some authors who have written on this disease, is that a fortnight after birth is the earliest period at which the symptoms appear. 2ndly this case illustrates the necessity of being able to diagnose this disease without enquiring as to its cause, for no doubt by his expressed suspicions of the former morality of the parents this gentleman not only lost their good favour, but this also occasioned them to seek further advice - in seeking which a fresh malady seized and stayed their child. Lastly it shows what I shall speak of more hereafter, that the eruption is not nee-
sparing of a scaly character as the term Syphilic Pсорiasis (which is applied to the skin affection) would imply.

In Hospital practice we seldom see the patient until this eruption has shown itself and very frequently not till after it has existed such a length of time that really no chance is left for the recovery of the child. The appearance of the infant is generally very characteristic— it is smaller than usual for its age, and is either fretful and unmanageable, or lies in the nurse’s arms in a state of listlessness, greatly emaciated, with cold extremities and a hardly perceptible pulse — I need scarcely say that this latter condition is the more unfavorable of the two. These however are not the characteristic symptoms I refer to: — in addition to what I have mentioned, the child’s expression of face presents a remarkable simile appearance; then there is that peculiar mode of breathing through the nose, vulgarly called the “snuffles,” together with
a peculiar alteration of the voice which is changed to a hoarse whimpering cry; then on looking at the root of the nose the hollow between the eyes is observed to be remarkably and much more than usually depressed; then on carefully noting the eyebrows there is very generally seen, either with or without other spots on the face or rest of the body, one small isolated coppery patch just above the supra-orbital foramen, whilst in a very great number of cases the eyelids are noticed to be devoid of eyelashes; and lastly perpendicular fissures are seen on the lips and horizontal ones at the corners of the mouth giving that orificia peculiar puckered appearance, and these cracks or fissures are made to bleed by the stretching of the skin whenever the child cries. This puckered or puckered appearance about the lips and corners of the mouth is very remarkable and I believe, even when the entire eruption both of the face and of the whole body
has disappeared, a striated puckering al-
ways remains around the mouth as a tell-tale of the nature of the cutaneous
affection—this distinguishing Syphi-
licitic Pseudomyc from Pustigo Lassais
and all the varieties of bezema and Her-
pes which during their existence do
disfigure the countenances of many of
our infant population, yet which,
when they have been successfully trea-
ted by constitutional medicines and
local applications, never leave any
scar or mark behind them, so that the
surface of the face always recovers its for-
mier characteristic smoothness pro-
vided however that great care has been
employed to prevent the child picking
and scratching the scabby surface, which
in a bad and delicate constitution would
perhaps lead to so much irritation as to
induce more than the ordinary degree of
ulceration and as a consequence more
visible cicatrices.

Now I really believe that these symp-
toms alone, which I have mentioned,
would justify the diagnosis of the disease and are all sufficient to indicate the treatment. But the first symptom that usually appears is what is technically called syphilitic oryza, consisting of a watering from the eyes, a serous or mucous purulent and sometimes a purulent discharge from the nose, which seems to irritate if it does not excoriate the adjoining skin; with that hoarse voice and peculiar difficulty of breathing to which I have referred, and which latter is very much increased if the purulent discharge is copious, and instead of being wiped off is allowed to concretify and block up the nostrils. The child's health is more affected than happens in common cataract (to which this oryza is generally attributed) and notwithstanding there is no diarrhea and the child is too young for dentition, yet the body wastes away and the patient becomes feverish, fretful and pallid. Sometimes however the stomach and bowels are disordered — no doubt from some of
the purulent matter descending into them from the back part of the nostrils.

We see but very few of these cases of dysphilitic oryza at the Hospital, probably, as I have just said, because the symptoms are often attributed to catarrh; or probably perhaps because they were so slight as not to have attracted the parents' attention; or again in some rare cases the oryza does not precede the eruption. When the eruption breaks out then the parents generally first think of resorting for advice, and very often not before it is too late for the skill of the physician to avail — bringing the child in their arms in a state of holhospnep, and great emaciation with the surface of the body cold and covered all over with this peculiar coppery eruption, and the pulse hardly perceptible.

This eruption generally commences first in the fold of the thighs and about the genitals and buttocks, hence spreading over the lower extremities and then to the rest of the body and face: it goes by
The general name of Syphilitic Psoriasis, but it is not always of the character we should expect from this term; for it sometimes appears as a mere bluish erythema, but sometimes of a coppery colour, in irregular patches over the sur-
face of the skin being not at all raised above the level of the cuticle and not be-
coming scaly; in fact the mother is but too willing to listen to the opinions of her neighbours and friends and to tell us that "her child has got the Erysipelas". This variety I have generally seen chiefly about the genitals, gums and buttocks. Again it sometimes begins in the form of copper-coloured papule or pimples about the size of a split pea, slightly raised above the surface of the cuticle. This variety I have also seen without being at all scaly in a child who was brought to Dr A Farre, and in whom they were more abundant about the face, neck and upper extremities than elsewhere but of so very faded a colour as not to be visible at a mere glance. In general
however the papulae are succeeded merely by scales on an exfoliation of the cuticle; though again this latter form may be aggravated into large blotches, which are slightly moist on the surface and which soon become covered with scales of enlarged cuticle into dark yellowish scabs. Now these eruptions have come out the tongue, palate and throat of the child become affected with small superficial ulcerations or aphthae. Frequently the only external appearance of the syphilitic tonsil are condylomata or mere fine tubercles situated where portions of the tonsil are naturally in contact; as about the anus, or between the scrotum or labia, and inside of the thighs, or even in the wrinkles of the neck.

If no advice is sought for or where it is afforded too late the child becomes excessively debilitated and emaciated and, if not worn out by marasmus, dies in nine cases out of ten in convulsions; whilst if properly and early attended to the prognosis is always favorable, both because the "vis medicatrix naturae" is
very active in children and because, Medi-
time has very great influence over this
disease.

The only disease for which the desc-
ption is likely to be mistaken is Pustular
Yaws, which on the delicate skin of
a young child is often frightfully severe.
The existence of the pustules—the itch-
ing it occasions—the absence of the
copper-coloured skin, of the peculiar
figures of the mouth, and of other syph-
ilitic symptoms—together with the
existence of itch in the attendants of the
child will sufficiently aid the diagnosis.
It is a remarkable circumstance and
which has been frequently observed
that the Iris is very seldom affected
at this early period of life with that
peculiar inflammation so well charac-
teristic of the venereal poison in the
adult, and in corroboration of this fact
I may mention that among a large num-
ber of syphilitic children brought
to Mr. Lawrence he never witnessed
Iritis but once. Some infected infants
have however a mucous-purulent discharge from the eye, but this is very minute in quantity scarcely overflowing the eyelids and accompanied with only a very slight redness of the conjunctiva bearing no resemblance to the Purulent Ophthalmia of infants caused by the existence of gonorrhoeal or leucorrhoal discharges in the passage of the mother during parturition.

Respecting the treatment of this disease I consider that the exhibition of Mercury is the best remedy that can be employed for the eradication of the Syphilitic taint. Hunter was of opinion that these cases both of infected infants and infected nurses were not venereal and has laid hold of a few particulars in which true Syphilis and these diseases seem to differ. These cases he says, show as much as possible that new persons are coming up every day, and also very similar to the venereal in many respects, although not in all. The cases he brings forward were cured eventually after the Mercury had been
dispensed with, however in all of them, some preparation of the mineral seems to have been at some period of the treatment employed. Most practitioners will however now affirm that the symptoms in the infant are exactly such as are repeatedly observed in the adult, and that the secondary symptoms of the nurse differ not in any respect from those secondary symptoms which are the consequence of genuine Chancres. Some argue that this disease in the infant at the breast, may be most safely and very certainly cured by subjecting the nurse to a full and regular course of Mercury. This no doubt is true in many instances, but independent of the frequent persistence of mothers and nurses in the assertion of their perfect immunity from any taint—this not warranting us in mentalizing their systems—many cases are reported to have required, in addition, that the child itself should be subjected to mercurial treatment. Therefore many practitioners, trusting to their own diagnosis
of the disease without attempting to direct a history which they know in many cases will be obstinately withheld or strenuously denied, direct their treatment only to the child disregarding the contradictory statements of either parents or nurses. The best mode of employing Mercury is, in consideration, in the Hydroargyrum & Bette once or twice a day according to the child's age. Children it is well known bear mercury very well, and under three years of age, it is almost, if not quite, impossible to affect their system so as to produce salivation; this is usually attributed to the quantity of viscous mucus which lines their bowels preventing the absorption of the medicine. This internal exhibition of Mercury is insufficient and is much preferable to rubbing in the blue ointment, for we can better regulate its employment and the parents are not so liable to use the remedy in excess. The external application of the White precipitate ointment however considerably benefits the eruption and in fact the condylomatae sores got well without
any additional supply of Mercury to the system.
When the eruption is very much inflamed
the Lotus Phumby or thin gelt sprinkled
over with the oxide of Zinc are the better
applications for the Rupt Hydropip.
Chloridi is then too stimulating.
When the child is brought with coldness
of the surface and an almost impercep-
tible pulse of course stimulants are indi-
cated and I think that the most man-
ageable stimulant for infants is Minute
doses of the Aromatic Spirit of Ammonia
in Camphor Mixture every four hours
not however neglecting a dose of the
Grey powder every night. Under this
treatment in favorable cases every symptom
disappears in from three to four weeks;
the Mercury however should always be
continued for at least three weeks more
which we cannot always act up to in
Hospital Out-patients for when the
eruption has subsided the parents consider
all danger to be over; the symptoms however,
especially when Mercury has not been finished
far enough, are very liable to return at
interval of a month or two becoming milder and milder until the virus is worn out of the system.

Respecting the treatment of nurses infected from syphilitic infants — it is that laid down for the general management of Syphilis in the adult; but it must be remembered that these cases are very obstinate and liable to relapse.

Dr. Connaught speaks of the advantages which may be derived from administering mercury to the mother during gestation and says "when the fetus is deeply tainted with Syphilis, abortion is less likely to be caused by salivation than from refraining from it."

We are however seldom, if ever, consulted as to the possibility of preventing the disease in the fetus already in utero, but as to its prevention in future children — our opinion may certainly be required and of our capability of doing so I shall now speak.

As regards what I shall call the Prophylactic treatment of Syphilitic infants, it will be advantageous I think to discuss it under two heads: 1st. The mode of preventing it in their future children, when from the production of diseased
offspring, from premature confinements, from
stillbirths, or from external symptoms.
The parents are suspected or known to labour
under secondary symptoms. 2nd. How far
secondary symptoms in the adult and thus
in a great measure Syphilitic infantum may
be prevented by the previous treatment
of the primary disease — with or without
Mercury.

Then firstly. From my want of actual experi-
ence on the efficacy of mercirializing the
parents, I shall no doubt be excused for
using the very words of those high authorities
on the Diseases of Children, Drs.bozon
and Marshall, which express their opinion
on the subject; they say: "The expediency
of putting the parents under the influence
of Mercury with a view to the prevention of the
recurrence of the disease in future children,
involves several distinct considerations.
If either parent exhibits unequivocal marks of
Syphilis there can be no doubt of the propriety of
adopting suitable means of cure. Frequently how-
ever we shall find no existing symptom of the
kind; and then we are to consider whether it
will be advisable to mercurialize one or both. If both have been formerly infected, it is our opinion that both should take mercury: if one has been affected, and the other apparently not, there is more difficulty in the case. If it be the female alone who has had the disease, we think it will probably be sufficient to treat her: but under opposite conditions, we are not so much inclined to hope for success from treatment of the male. In other words, we are inclined to suspect that at least may be communicated to the female parent, without its being rendered manifest by any outward marks. The subject however is in great obscurity and requires many more observations for its elucidation."

Secondly. Respecting the treatment of primary syphilis in the adult with or without mercury. Notwithstanding the high authority of Hunter, who not only declared that mercury was the great specific for syphilis and that nothing else was to be depended on, but severely upbraids human nature for doubting it; for he says—"Nothing can show more the ungrateful or unsettled mind of man, than his treatment
of this medicine. If there is such a thing as a
specific Mercury in one for the venereal disease,‘
evertheless there has arisen diverse opinions
among practitioners respecting the truth of
this assertion; some going to the other extreme
and discarding the mineral entirely from
their treatment of Syphilis, some still ad-
hering to the doctrines of Hunter, whilst
others again rather modify his extreme view
and employ mercury or not according to
the stage and period of existence of the
disease.

British practitioners were the first
to point out the benefit of the non-mercu-
rial treatment in many cases where
mercury was supposed to be necessary.
Dr. Green of Bristol from what he has seen
and read draws the following inferences:
that every form and stage of venereal (except
vitis) can be completely and better treated
without mercury than with it; that in some
cases, mercury not only fails altogether to
cure, but aggravates the disease; and there-
fore is not a specific; and what have been
considered as some of the worst cases of
secondary syphilis result from Mercury itself.

Dr. Guthrie from 100 cases of primary sores treated without Mercury thinks it an established fact that every kind of ulcer on the genitals is curable without this mineral which he does not consider a specific for the venereal although a gentle course of it will expedite the cure of some cases.

Dr. Thompson remarks that he never observed in his 400 cases treated without Mercury any of those deep and foul ulcers of the skin, of the throat, of the mouth and nose, or the painful affections of the bones, which are stated by every writer on Syphilis as the general products of the venereal virus. Sclerosis happened only in 1 out of 154 cases thus treated by him.

In 417 cases similarly treated by Dr. Hennen, Sclerosis occurred only in 2. He says secondary symptoms occurred only in 11 out of 105 cases of primary sores treated without Mercury which kind of treatment cured them all except one obstinate and anomalous case.

Dr. Rose treated 120 cases without Mercury and no unfavourable result followed.

In the report from the Army Medical Department, from Dec. 1816 to Dec. 1818 there appears
To have been treated for primary venereal ulcerations on the penis (excluding not only the more simple cases, but also a regular proportion of those with the most marked characters of syphilitic chancre as described by Hunter), 1940 cases; of these 1940 cases, 96 had secondary symptoms of different sorts; of these 96 cases of secondary affections, mercury was had recourse to in 12. In the 1940 cases of primary symptoms, mercury was used only in 65. If we deduct the 65 and 12 cases in which mercury was used, from 1940, 1863 cases remain completely cured without mercury. The average time required for the cure of primary symptoms without mercury when tubo did not exist, was 21 days, with tubo 45 days. Average period for cure of secondary symptoms without mercury was from 28 to 45 days. In the same period 1827 cases of primary symptoms were treated with mercury; secondary symptoms occurred in 51 of them. The average period for the cure of primary symptoms without tubo was 33 days—With tubo, 50 days; and for the cure of secondary symptoms, 45 days. From this report where Mercury was not given
The primary sores were cured sooner, but were followed more frequently by secondary symptoms which however were not so severe as those which occurred after Mercury had been given. Dr. Green thinks Mercury should never be used in primary symptoms although in some cases of secondary it may be of use. He healed in from 14 to 20 days 100 cases of chancre without any Mercury. Of these buboes supervened in 16 of which 6 only suppurred. Secondary eruptions followed in 7 cases viz: papular in 3, punctate in 2, vesicular in 1, vesicular and scaly in 1. Sore throat occurred in 4 cases. In 3 conferred with eruptions; periostitis occurred in 2 cases, which yielded to counter irritation.

There was not one case of crisis. Those cases which got into an indolent condition and became chronic he thinks are benefited by Mercury.

Dr. T. Price from his surgical annals published in 1825 appears to have treated Syphilis at Nambour both on the Mercurial and non-Mercurial plan: the period during which the former was pursued comprised a space of eighteen months and
A half (from January 1524 to July 1525); with females of 21 months (from January 1524 to October 1525).

The latter occupied with males a period of two years and five and a half months; with females, of two years and somewhat more than two months. The following are the respective conclusions of the results of each plan to which he has arrived. "With regard to the certainty of the cure, as far as the mercurial treatment is concerned, we must say, with many of our unprejudiced colleagues, that we are convinced by bitter experience, that syphilis very often returns in the secondary form, after the most cautious use of mercury, the strictest attention to diet, and a proper observation of precautionary measures. Of 573 patients, treated during the first period, 165 (be nearly one third) were attacked with secondary symptoms. All these were treated with mercury for the primary symptoms; although, it is to be observed, the smallest portion of them had been under our care. Of those attacked with secondary syphilis, by far the greater portion had, at an earlier period and before admission,
or while in the hospital, used mercury for the cure of the disease. Many patients in whom the disease was supposed to have been eradicated came back (particularly after the use of mercurial fumigations), with cancers of the bone of the face; some of these were afterwards cured without mercury, others are still under treatment."

As regards the Non-mercurial plan, he says:—

"At this present time (Feb'y 1829) after a trial of two years and a half and the successful treatment of more than a thousand patients, the results of this treatment have proved so favorable, that there appears no reason for lightly abandoning it, or returning to the former plan of treatment. As already stated, patients are cured in a much shorter time than before, and leave the hospital with much healthier looks. All the unpleasant phenomena attendant on salivation no longer harass them. Formerly, notwithstanding the greatest attention and cleanliness, it was impossible to remove the foul smell from the venereal wards, or to keep the rooms or beds clean; the air was tainted with the offensive odors of salivation and syphilis; the earlier, and jelly was the order of the day.
in all the wards occupied by patients under full salivation. At present there is not a trace of
this air in a ward containing 60, 70, and
sometimes 100 patients; and the venereal
department of the hospital rivals the other
divisions in purity of air and cleanliness.
Syphilis too, seems to become gradually more
simple—at least it never appears in the same
malignant form as before, where little or no
Mercury has been used. In 1538 we find that
St. Erasmus in a letter to F. Perrenes of Dublin
says "that he had more reason to abandon his
new method of treatment: on the contrary, fur-
ther experience has not only confirmed his
previous observations in every instance, but
also a series of cases, now amounting to several
thousands, has forced upon him the conviction
of the superior efficacy of the non-merscurial
plan."

From a paper published in the Berlin Medical
Gazette by Dr. Thurney, we find that of 141 pa-
ients in the venereal wards of the Charité
Hospital at Berlin he did not meet with a
single case in which the non-merscurial
plan had not succeeded, when combined
with a rational consideration of the peculiarities of the local disease. On the other hand he had seen many out-patients treated with mercury for weeks and months together without any advance being made towards the healing of primary sores, or, in many instances, without any effect in arresting their destructive progress.

Both modes of treatment were followed at the Charité, but it was found under a similar management of the local affections, those patients who were treated with mercury could not be discharged for 2 or 3, or even 4 weeks later than those who had not undergone any mercurial treatment. Respecting these cases at the Charité of Berlin says Dr. Frabetz: "I must add however, that secondary syphilitic affections are not usually admitted into the hospital destined for venereal patients, but sent into the wards of the Surgical clinic, so that in the venereal department, the great majority of cases which come under treatment are primary affections. These patients are dismissed as soon as cured, and they scarcely have it the Charité any means of ascertaining the frequency of secondary affections."
The advocates of the non-mercurial treatment hold it as undisputed that Periostitis and Otitis never occur as the result of the syphilitic poison unless Mercury has been employed in the treatment; whilst on the other hand some mercurialists have warmly asserted that Mercury never gives rise to these diseases unless where there exists a syphilitic taint in the constitution. The majority of practical men of the present day believe are of opinion that Diseases of the bones are certainly as frequent as a consequence of Syphilis, when the primary sores have been treated without Mercury. Hunter, Paracelsus, and Dietrich all give their testimony that Mercury is capable of producing periostitis and otitis; whilst Bretts never noticed these diseases as occurring in the numerous artisans who were employed as workers in Mercury and whom he had abundant opportunities of watching. Frick, Rose, Guthrie, Hennen and others all confirm the view that Syphilis by itself never does produce these secondary affections of the bones and periostea. Hennen has in fact recorded a case where modes made their
appearance during the existence of primary sores, in consequence of the exhibition of only very small doses of Pil. Hydrargyri, which was being given in the treatment. The nodes disappear when the medicine was discontinued. There are however exceptional cases to the views of these great authors, and we must admit that the Syphilitic poison of itself does sometimes, although very rarely, induce these two secondary affections; but never the less it must be remembered that it is in such cases always important to enquire whether or not the patient has ever at any previous period taken Mercury for any other disease — for it is a fact well established that this medicine will remain an exceedingly long while in the system, and therefore, as a consequence of this, nodes may develop themselves during the non-mercurial treatment of a case of Syphilis. In confirmation of this opinion there is a case on record, where a patient on undergoing the treatment at a Hydro-patrick Establishment, became violently salivated although he had not taken again of Mercury for the space of eighteen years.
Notwithstanding the host of facts I have adduced bearing on the question of the non-mercurial treatment of primary and secondary syphilis, men of the highest rank of the profession have not as yet agreed on this diversity of opinion to the publication of the success of the non-mercurial treatment. I think, however, we can trace the fact of this mineral being no longer abused in the empiricical and barbarous manner it was formerly, for few, if any, practitioners of the present day venture to commence long and exhausting courses of mercury for slight chancres or to cure delicate or susceptible constitutions. I think there is no doubt that a genuine chancre, when treated at the beginning, may be cured without mercury and I am rather inclined to maintain from observations made on the out-patients at King's College Hospital during my apprenticeship, that there is a certain period during which a chancre is a purely local disease and that if treated in this period, I consider caustic applications are capable of destroying the virus that absorption of it does not take place and thus the constitution
remains unaffected. I have seen cases, if treated thus early, heal rapidly without any unfavorable result and without the superintervention of tuboes—whilst if the caustic applications were employed at too late a period, with the idea of destroying the specific virus, they excited considerable inflammation, increased absorption and favoured the production of tuboes. I have known chancrees destroyed and heal kindly if so treated as late as the fifth day after their first appearance—but never later—and of course the longer the sore has existed, the more powerful must be the caustic applications: Nitrate of Silver will suffice on the first two or three days but from that to the fifth day, the strength of Trichopurpurin would be required to render the poison innocuous. If the caustic fails in its effects, the remedy is, at the Hospital, I am speaking of, generally commenced, with immediately, and the patient is put through a regular course of this medicine not only till the sore has healed—but his gums are kept slightly touched for a month or six weeks afterwards.

The general mode of
exhibiting Mercury in the treatment of Syphilis, is to give Pilula Hydrargyri p.r. every night and morning (with or without Opium, in order to counteract the purging effects of the Mercury), until an effect on the gums is produced, and this effect is kept up by frequent doses afterwards. I think however, that this plan entails the exhibition of an unnecessary amount of Mercury, which, being in such large doses, is rendered much more liable to pass off by the bowels than to remain in the system, and if it does not purge cannot be regulated with such nicety as rather to affect the disease than the system, which I conceive ought to be the primary indication of its employment. The mode adopted on board H.M.S. Dreadnought, the Seamen's Hospital ship at Greenwich, is one that I consider a much better and more expedient way of producing salivation; the patient, if a fit subject for this treatment, is kept for a few days in bed, and on low diet with merely black wash applied to the sore, and if necessary a purge is given; the exhibition of the Mercury is then commenced with according to the following prescription:
Of Pul Hydargyrum μ: Ext Papaveris μ: Aft
pelleties in the meantime.

This more frequent employment of small doses of mercury is found very successful—purging is never produced, and soreness of the gums is generally brought on as early as the fourth day after the commencement of the pills, the patient being still kept on low diet. I attribute the rapidity of the action of the medicine in most of these cases to the system being placed in the most favorable position for the action of mercury by the preliminary and preparatory regimen enforced. If salivation is not speedily induced, as from some peculiar idiosyncrasy which sometimes happen the action of the pills is further assisted by the rubbing into the gums of the Pul Hydargyrum, and when once brought on the effects are easily maintained by the continual exhibition of these small doses which do not prove so detrimental to the constitution as the larger quantities do if not carried off by their purgative action.

No one who wishes to treat Syphilis...
ought in my opinion to enlist exclusively under the banners of either the mercurialists or the non-mercurialists; for there can be no doubt that a great majority of primary sores may be cured without mercury, if treated at once and properly; whilst it is not to be disputed, if we credit the experience of Hunter and other authors on this subject, that secondary symptoms are more frequent when no mercury has been given than when the patient has been cured by a regular course of this mineral. Again, after chancres have existed for some time, the chances of secondary symptoms are greatly increased, and in such cases no doubt mercury is the safest remedy provided it be used with caution and moderation. Therefore, I think we ought to give many cases of primary sores a trial of the non-mercurial plan, especially if seen at the commencement, and where they appear in persons of a delicate and scrupulous habit; for if treated properly and early by this non-mercurial plan, the patient has many chances
in his favour, and if there be no amendment or if secondary symptoms should supervene, we have still a resource in mercury which will still act favorably on his system and doubtless with much greater advantage having been preceded by a preliminary and preparatory treatment.

Respecting the possibility of curing secondary symptoms without mercury, there has also been a great diversity of opinion among practical men: some attributing to the power of the non-mercurial plan over this stage of syphilis also; some affirming that if a patient labouring under secondary symptoms be treated without mercury, he may get well for a while, but that the disease will return again and again until it completely breaks up his health; whilst others base their treatment of secondary syphilis on the previous treatment of the primary sore — if the symptoms have supervened after the patient has undergone a full and perfect course of mercury for the primary affection they rely on other remedies, such as Soda of Potassium, Yarsaparilla, &c. with or without
slight alternative doses of mercury) to eradicate the venereal taint from the system; whilst if the patient has not previously been treated with mercury, or if he has been subjected to an imperfect course of it, they put him through the regular routine of this medicine for his secondary affection.

That there are cases of confirmed secondary syphilis which may be cured without mercury even when the primary sore has been healed by the non-mercurial plan, is evident from the recorded experience of Fritze and others; whilst it is equally true that there are many cases of secondary symptoms occurring in constitutions otherwise excellent and free from any suspicious taint, in which the poison seems rapidly to undermine the strength and instead of growing less, violent seems actually to acquire fresh vigour by time, so that mercury can no longer be withheld with safety to the patient. On the other hand, we sometimes meet with such painful and distressing cases of general and general disease of the whole system from the venereal taint (probably, and no doubt...
frequently, aided by the presence of mercury), that our only hope of sustaining these broken-down constitutions is by the exhibition of acids and bark with nutritions and sometimes even stimulating diet to enable the system to bear up for a time against the protracted ward of the poison.

The treatment of tertiary symptoms is apart from the subject of my thesis for the experience of Bidord and Lugol shows that when these appear the disease ceases to be here-dilitarily transmissible.—Perfura being then engendered in the future offspring.

As a fit conclusion to this paper I cannot do better than mention the general results so ably drawn up by Dr. Snell on this subject from the experiments made by the Army Surgeons and especially by Rose, Zertie, and Wennes:

1st That all kinds of primary and secondary symptoms may get well without mercury.

2nd That out of 1940 cases treated without it, 96 had secondary symptoms; and out of 2827 treated with it, 51 had secondary symptoms.

The average results of different experimenters
however, show that there are at least seven
times as many cases of secondary symptoms
when no mercury has been given, as when
it has.

3d That the secondary symptoms of cases
affected without it are in general less severe,
and that affections of the bone in particular
are much less frequent.

4th The average period of cure is much
the same in both cases; but that relapses
are more frequent where no mercury has
been given.

An indication of my still
lingering adherence to the treatment of
some cases at least of syphilis by the mer-
curial plan, I need merely advance the
introductory words of this dissertation—
"that the subject treated of should em-
brace the original observations and
contain as much as possible the precon-
ceived ideas of the writer"—for the only
opportunities I have had of studying the
disease at all on the large scale have
been at King’s College Hospital and on
board H.M.S. "Treadnought" or "Sensen"
Hospital, at both of which places, by a careful
selection of cases with attention to all the
contraindicating symptoms and strictly
watching and regulating the effects of the
drug. This modified (I may call it) exhibition
of mercury is attended with the most
successful results both in primary and sec-
ondary syphilis.

The practitioners in Scotland, I believe,
inecline rather to the total exclusion of this
mineral and to the adoption of the so-called
"simple" mode of treatment. The evidence
in favour of this latter seems certainly almost
overwhelming, and if hereafter Fortune
gives me an opportunity I shall feel it
my duty (as I think everyone should) to try
and add my mite of evidence in favour
of the non-mercurial plan, in hopes of
further diminishing the employment of a
drug whose abuse, and even use in
certain idiosyncrasies, is attended
with such frightful and zealous consequences.

26 Elder Street, Edinburgh
March 1851
Robert Fowler