On the relative frequency and value of certain symptoms of congenital lues / W. Bathurst Woodman, M.D.

ON THE RELATIVE FREQUENCY AND VALUE OF CERTAIN SYMPTOMS OF CONGENITAL LUES.

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ON THE RELATIVE FREQUENCY AND VALUE OF CERTAIN SYMPTOMS OF CONGENITAL LUES.

Many of us have perhaps thought that the labours of Diday, Lancereaux, Henry Lee, Hutchinson, and other observers, had established the fact of hereditary transmission of the syphilitic cachexia almost beyond question, doubt, or cavil. The temper of our age is however less easy to be persuaded; it bends to no authority, however eminent. And now that Dr. Ballard has boldly thrown down the gauntlet, and has plainly asked the question, as if it had never been asked before, "Is there such a thing as hereditary syphilis?" the medical public, and all who are interested in this question, will probably demand fresh evidence, rather than be content to refer to any published works or papers, however eminent their authors. This paper can only be taken as an incidental contribution to the new evidence which will doubtless be furnished abundantly toward the solution of this question, because my object is rather to direct attention to the relative value and frequency of certain symptoms, than to discuss their ætiology. It may, however, be taken as an indirect and independent witness on the question, for this reason: it is based upon two hundred cases of children, in all of whom one parent was known to have suffered severely from syphilis, and in all but four or five there was evidence that *both* parents had so suffered. All but three were patients of the North-Eastern Children's Hospital, and I made it my endeavour to sift the evidence as carefully as I could. In the majority of these cases I saw both parents myself, at some time or another. And a very large number of them admitted having had syphilis, so that I did not rely merely upon symptoms in the case of the parents.

These data are derived from rather more than five years' experience at the Children's Hospital to which I am attached. My notes of cases of infantile syphilis were nearer five hundred than two hundred, but I have rejected all those in which I had not clear reasons for believing both parents to have contracted the disease, and I have rejected all in which the symptoms appeared to me at all equivocal.

Of the two hundred cases, exactly half are males. Although this may seem a singular coincidence, there seems *à priori* no special reason why sex should give immunity or predisposition in this case. As regards the special lesions, however, male infants have seemed to me rather more subject to thrush and affections of the mucous membranes than females of the same age. More than half of the cases were under two years of age, and only twelve (or six per cent) were more than five years of age. I have therefore thought it useless to give any tables of the exact ages at which the various symptoms occurred, preferring to remark on the subject of age under the various symptoms.

The following is the relative frequency of the disorders named, in the two hundred cases (one hundred males and one hundred females) referred to.

TABLE OF DISEASES IN 200 CASES OF CONGENITAL SYPHILIS.

Diseases.	No. in 200 Cases.	Per Cent.	Diseases.	No. in 200 Cases.	Per Cent.
Thrush.....	131	65·5	Mucous Tubercles ..	39	19·5
Snuffles	108	54·0	Adenitis (see explan.)	32	16·0
Gummata.....	84	42·0	Nodes on long Bones	10	5·0
Specific Skin-diseases	71	35·5	Enlargements, &c., in Internal Organs ..	6	3·0
Disease of Anus and Genitals	59	29·5	Iritis or Corneitis ..	5	2·5
Glossitis & Gingivitis	45	22·5	Notched Teeth.....	5	2·5

Taken by itself the table is of little value, but read in the light of the clinical histories, it conveys to my own mind an almost overwhelming proof of the extent and duration of the ravages of syphilis in the early periods of growth and development; for during the period named, more than ten thousand children (besides the five hundred children named) have come under my notice, and if the same symptoms had been present in anything like the same proportion in the children of parents who presented no obvious

symptoms of syphilis, the numbers in my table must have been multiplied by fifty at least. On the contrary, the five hundred named include *all* the cases in which I could fairly attribute the symptoms to a syphilitic taint. Lest this mode of speech should be considered a *petitio principii*, I will guard myself by explaining, under each heading, the special characters presented by the particular symptoms in the two hundred cases of which the parental history is well known.

PARENTAL SYMPTOMS.

It has been stated previously, that a great majority of the parent admitted having had syphilis. It is, therefore, not necessary to minutely analyse the cases. In order, however, that it may not be objected that this may have been a mistake on their part, and that they really may have suffered only from urethritis or vaginitis, and kindred diseases, I wish to record that all the mothers and most of the fathers suffered from secondary and tertiary symptoms: such as skin diseases, particularly palmar and plantar-psoriasis; onychia; loss of hair; ulcers of the tongue, tonsils, and of various mucous membranes; recurring iritis, ulcers of the "punched out" type on the legs, gummy tumours, nodes, and necrosed bone. In addition to these symptoms the mothers had also suffered from repeated miscarriages, and had had numerous dead-born children. Five or six miscarriages and three or four dead-born children were common. I have also noted fourteen miscarriages and eight dead-born children in the case of one woman, who had but one living child.

THRUSH IN INFANTS.

The per-centage given in the table really represents a very small proportion of the cases which actually occurred; the reason being that I have noted there only the cases *treated* by me. Thrush actually occurred in nearly all the two hundred cases, and in nearly all within six weeks of birth. The statement, so commonly made, that "the child was born quite healthy, and remained so till the mouth got sore," must be taken as merely a popular statement, and not as literally true. A large proportion of these children were not only premature, as regards their birth, but had an unmistakably senile look. The causes and varieties of stomatitis

in children are very numerous ;* and often difficult to diagnose one from another. I am therefore indisposed to lay much stress upon the existence of thrush as a symptom of hereditary syphilis, but the following appear to me somewhat characteristic features.

(1) Its early occurrence.

(2) Its tendency to relapse.

(3) The numerous points of ulceration, which are less symmetrical than those of simple herpetic stomatitis, less virulent than noma or cancrum oris, and more circular than arsenical sores.

(4) It may be accompanied by other symptoms, such as snuffles, sores at the angles of the mouth, and pemphigoid eruptions.

(5) Its colour, at least in the earlier stages, is less brilliant and pearly than the patches of true thrush or *muguet*. The colour of these vegetable growths has been well insisted upon by Trousseau, with his accustomed eloquence. He considers the comparison to the blossoms of the lily of the valley a good one, and such indeed it is; whereas the syphilitic thrush is of a dirtier tint. Of course the two may be combined; and in the later stages some form of vegetable growth is often superadded to the original disease. For this reason, I have retained the common name of "thrush" in preference to any more definite nosological term.

(6) The parental and family history may perhaps furnish us with useful hints.

(7) Purely local treatment will seldom (at least in the poorer classes, or in bad cases of thrush in better cared-for infants) be found of much use; whereas in the parasitic or vegetable thrush this will almost always be sufficient for the cure.

"SNUFFLES."

Chronic coryza, affecting the mucous membrane of the nose; though marked in the table as somewhat less frequent than thrush

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* Amongst *causes* the following may be mentioned:—starvation; dirty utensils and sour food (giving origin to fungi, confervæ, and other low forms of vegetable life); arsenical pigments, and furs preserved by arsenic; phosphorus poisoning; herpetic and contagious catarrhal affections; and the exanthemata.

is probably quite as common, or more so. I do not claim any special knowledge on this point, and the only remark I wish to offer on this symptom is, that I have very frequently known it mistaken for bronchitis. It might be thought that only ignorant practitioners could make such a mistake, but the reverse has not infrequently occurred in my experience. Of course the fact that the dyspnœa occurs almost entirely during lactation or feeding, the cessation of the râles when the nostrils are compressed, the less frequent respirations, and the absence of the thoracic signs of bronchitis, easily enable us to discriminate in cases where there is no bronchial affection.

SORES ON THE TONGUE, LIPS, AND ABOUT THE ANUS.

The same children who suffer from thrush in infancy, are often troubled through the whole of childhood with intractable (as regards purely local or non-syphilitic treatment) sores on the tongue, the commissures of the lips, and within and about the anus. These sores are sometimes symmetrical, but more often, like the majority of tertiary ulcers on the legs in adults, are one-sided. The base of the sore is deeply fissured, and generally indurated; the sores themselves often have a worn look, and remind one of a hat the worse for wear. On the tongue, which is seldom so deeply fissured as in adults, there may often be seen a patch which looks as if a hot iron had been passed over it. And the neighbouring glands are usually found enlarged (but not very greatly) and very hard. These glands seldom suppurate.

SKIN DISEASES.

Pemphigus, (which is not seldom confounded with varicella,) gyrate and annular forms of psoriasis, rupoid ecthyma, and mucous tubercles, spreading from such parts as the vulva, anus, commissures of the lips, &c., are the most common and the most definite of these cutaneous maladies. But there are many more of these cases which present rashes of a mixed character. In fact, so often has this occurred, in the same series of cases, and in the same children, who have presented the more definite lesions, that I have not hesitated to endorse the dictum of a famous dermatologist, that a skin disease, which is not scabies, and yet presents a combination of the characters of other cutaneous diseases, is, in all human probability, and by very virtue of this character of "mixedness," a syphilide.

If we adopt these opinions, we shall have the following general characteristics of syphilitic skin diseases.

(1) Their colour is often peculiar: coppery or bronzed, or of a dirty tint, with mottlings.

(2) They often mix or mingle to the naked eye, the characters of two or three varieties of skin-disease.

(3) They are very chronic, often symmetrical, and have a great tendency to scar, or, in other words, to leave their mark upon the patient's body.

The most noteworthy skin disease met with is that generally known now as Xeroderma, a name which is sanctioned by Mr. Hutchinson. In one of the families treated by me, four children born previous to the parents' syphilis had very nice, clean, clear, soft skins; the four next in age, born after the chancres in the parents, had coarse, red, raw-looking skins, dry, and thick, with large epithelial scales, in fact looking very much as if they were just recovering from a very bad attack of scarlatina, only the skin was more thickened and more prone to crack. Warm baths, oiling, and the use of mercury and the iodides, have effected, in the course of time, considerable improvement in these cases, and in others of the same kind. I have made them sleep in the greasy garments, clean ones being put on in the day-time.

GUMMATA AND MUSCULAR NODES.

Gummata occurred in eighty-four of the two hundred selected cases, which is equal to forty-two per cent, or nearly one half. The same little patients were often brought for five, six, or seven successive years, for a recurrence of the same symptoms, but I have not included repetitions in this or any of the other observations. My experience is that there is no more certain mark of inherited syphilis; in other words, these affections occurred in cases with the clearest history of parental syphilis on both sides. Yet, though perfectly characteristic, gummata are often mistaken for boils, even by medical men, and are constantly called boils by the parents. As Diday's work on Infantile Syphilis, and many of our text books, omit all description of them, it may not be amiss to dwell a little on the characters of gummata. It is not possible to make the

diagnosis simply from the locality, for, like boils, they occur in all parts of the body, but not indifferently. A very favourite situation is the fleshy part of the buttocks; the inner side of the thighs and of the forearms are other common sites. But when solitary, they not seldom come in the cheek, on the shoulder, in the neck, or on the dorsum of the foot or of the hand. They are often solitary, but when multiple will commonly be found all on one limb, or on one half of the body, like tertiary ulcers. I have met with them as early as five weeks, but they are more common after the first dentition, and before puberty. They seldom require the knife, except for cosmetic purposes; in other words, if an incision is required, it is only when the skin has been hopelessly undermined, and this is often the result of injudicious treatment, very often of poulticing, which is very seldom necessary or judicious. In the great majority of cases the skin may be preserved, and the gumma may be completely absorbed by early and appropriate treatment. The typical gumma is soft in the centre, slightly raised, and more or less flattened; in other words, less acuminated than a boil, and surrounded by a well-defined ring of induration, so that the whole much resembles a wooden ring covered with wash-leather. In its earlier stages the skin is often not at all discoloured, afterwards it commonly has a purplish colour, with less of a bright or "angry" red than is common to boils. There is thus a strong resemblance to a button, and hence the French name of "*boutons*" which is given to gummata. The true gumma is seldom deeper than the subcutaneous areolar tissue, and can therefore be freely moved over the subjacent muscles. This character is of course not diagnostic. Its contents, as indicated by the name, are of a gummy, glutinous nature, like a solution of gum acacia, and, like that, they may be very thin, or very thick and tenacious, but they are rarely or never true pus. Even when they are said to "suppurate," the so-called "pus" is badly formed, shreddy, thin, and mixed with blood. When two or more of these gummata are closely adjacent or coalesce, the figure is of course less circular; and the induration surrounding them may be of a dumb-bell or figure-of-eight form, thus ∞; or elliptical; or like three 0 0 0's thus arranged, $\overset{\circ}{\underset{\circ}{\circ}}\circ$. As may be easily imagined, and except for being covered with skin, there is no essential difference of figure between these and two or three tertiary sores when situate close to one another.

The primary object of our treatment should be to procure absorption, without destruction of the skin; and at the same time

to improve the general health. To secure these objects, I generally give the iodide of iron in an extemporaneous form like this :

℞ Vin. ferri, ʒ j ad ʒ ij.
Potassii iodidi, gr. ij ad gr. iv. M.
Fiat dosis ter die sumendus.

Should there be more than one of these gummata, it will be well to employ mercurial inunction, or small doses of Hydrarg. cum cretâ or of Calomel. The diet, which should be specially attended to, should be nutritious and easily assimilated ; sometimes it may be necessary to prescribe stimulants, and to combine cod liver oil with the medicine. To save the skin, if not too much undermined, either collodion, or glycerine with tannin, or support with cotton wool and a bandage, is generally all that is required. On parts, such as the cheek, not exposed to pressure, no local treatment at all may be necessary. On the buttock, and elsewhere, where there is much pressure, it may be well to apply a plaster, perforated in the centre after the pattern of a corn plaster, of soap, lead, or some other non-irritant, but sufficiently adhesive, material, spread upon felt, or amadou, or upon two or three thicknesses of chamois leather. We can thus from day to day watch the gumma without disturbing its surroundings. But if the skin threatens to give way, it is better to make a sufficiently free incision at once, and then apply some simple unguent, and firm but light compression. It may be easily imagined that post-mortem examinations of such cases are very rare under proper treatment. I will not therefore dogmatise on the actual nature of the morbid process. It is commonly regarded as a sort of exudation of a low form of connective tissue plasma,* but I confess my own view of their origin strongly leans to the view that there is a local embolism, or at least thrombosis, and that they originate in plugging of vessels.

Had I included the larger, more irregular, and brawny indurations occurring in the connective tissue and fasciæ, the percentage of cases would have been much larger. But although these undoubtedly occur in specific cases, and occurred in this series very frequently, they are less characteristic than either gummata or muscular nodes; and it is not so easy to differentiate them from certain forms of œdema, and diffused abscesses, and cellulitis of a

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* See "Rindfleisch," Dr. Baxter's translation, vol. I, p. 134. New Sydenham Society.

low type, except by that sort of wisdom which comes after the event. I am, too, not at all clear that they may not occur soon after some other of the exanthemata, and for this reason I have excluded them from the table. As regards the specific nature of any symptom, I must also refer to my concluding remarks in deprecation of any charge of rashness on this point.

In a doubtful case, the previous history of the child and its *parents*—using that word in the wide sense of including all the blood-relations who may be nearly allied—may serve to give us hints as to the treatment.

TABLE OF THE CHIEF DIFFERENCES BETWEEN BOILS AND GUMMATA.

BOILS.	GUMMATA.
Have a great tendency to point, or assume a conoidal form; and scarcely ever terminate without destruction of skin.	Are not so acuminated, but are flatter, and more rounded on the surface; they often disappear without any destruction of skin.
The skin is always implicated in the inflammatory processes, even in early stages.	In early stages the skin is often quite free from colour, and not so implicated.
Induration is general, and fluctuation not easily made out at first.	The induration is more or less *annular*, often strikingly so, and the centre is always soft and fluctuating.
The contents are *thick* and purulent, with a hard core, or shreds.	The contents are generally very like thin, dirty gum water, and the shreds are fine; there is no distinct core.

MUSCULAR AND PERIOSTEAL NODES.

Muscular nodes are not very uncommon in the subjects of inherited syphilis. They are, I think, somewhat less frequent in children than in adults; indeed, I have found the ages of forty to fifty years most subject to them. I suspect that in children, they more often come under the surgeon's notice than under that of the physician. Still I have met with numerous cases, even in children, but am sorry to say I have not preserved accurate notes of their frequency. It appears to me that the diagnosis is not difficult; the only affections very liable to be confounded are deep-seated abscess and phlebitis. In the former, the course of the temperature

would probably help us; and the absence of cord-like induration of the veins, as well as the absence of general œdema, (like white leg,) would enable us in most cases to distinguish this affection from phlebitis.

Ten cases out of the two hundred were marked by periosteal nodes, on several bones at the same time, and of the most striking character. This amounts to five per cent of the cases. Our consulting surgeon, Mr. Hutchinson, saw several of these cases with me; and one or two of them were, I believe, shown at the Hunterian and other Medical Societies. In one boy, aged three years and a half, every long bone was thus affected; and he presented a most extraordinary appearance, from the amount of swelling giving his lower extremities, in particular, a very gibbous and uncanny aspect. The deformity was easily distinguished from rickets, by the fact that the shaft, and not the epiphyses, was chiefly affected. Although not free now from other syphilitic symptoms, he has quite recovered from this affection.

I have found iodide of potassium in *large* doses (gr. ijss to gr. x.) considering the age, combined with mercurial inunction and the external use of iodine, the best treatment.

DISEASE OR DEFECT OF THE TEETH.

It may not unreasonably be asked, why this figures as only two and a half per cent in my table, whilst Mr. Hutchinson lays such stress upon this diagnostic mark? The answer is simple. The characteristic test-teeth are the central permanent incisors of the upper jaw. Now less than ten per cent of my cases had attained the necessary age to show this peculiarity. The fact that more than half of these did show it in a marked degree, is a strong confirmation of my argument, and needs no comment to a candid mind. But readers who know Mr. Hutchinson's views on specific keratitis (corneitis) may require some explanation of the small percentage of eye-cases in my table. I therefore pass on to

CASES OF DISEASED EYES.

These are put down at the low figure of two and a half per cent or five in the two hundred. Whilst the explanation of age may partly explain the fewness of these, I believe the true explanation is to be found in the contiguity of Moorfields Ophthalmic Hospital, which has acquired a reputation in specific eye diseases, on account of Mr. Hutchinson's researches, and the care and interest he and his

colleagues there have devoted to these cases. It is, however, very remarkable that four out of the five cases thus seen by me, were cases of iritis, and it is known that this disease, except the traumatic form, is rare in childhood and infancy. Yet it was well-marked, severe, and recurrent, in these four cases. In all four both parents had had chancres, and severe symptoms of constitutional syphilis. The fifth case was one of severe interstitial keratitis.

SYPHILITIC DISEASE OF INTERNAL ORGANS.

Of this there were six cases, or three per cent. The liver was affected in five, the spleen in three, whilst *both* organs were affected in four of the cases: or, more clearly,—spleen only, one; liver only, one; both organs, four; total of six cases. Enlargement of the organ affected, with induration which on careful palpation was found to be softer in the centre; the gradual disappearance of this, and of the enlargement; the history of the child and its parents; and the existence of some other symptoms of the disease, —were the characters which induced me to make, and persist in, the diagnosis of gummata of the organs referred to. In one case, however, a male child aged six months, I obtained a post-mortem, which showed characteristic tumours in the spleen and liver, and numerous circular ulcers in both large and small intestines. The lungs and other organs were quite free from tubercle. I have no moral doubt of the existence of cerebral, pulmonary, and other gummata in some of my cases, but as they were not verified by post-mortem examination, I will not encumber my argument with them.

SPECIFIC ADENITIS.

One of the articles of my pathological creed, and one on which I most strongly insist, is the extreme rarity with which lymphatic glands are primary seats of disease. Over and over again have I demonstrated at our Children's Hospital, and also at my out-patients' clinic at the London, how "strumous" glands, which resisted cod liver oil and other supposed appropriate medication, got rapidly well when let alone, if only we got rid of the porrigo or pediculi, or both combined, met with on the hairy scalp of such cases. I have therefore omitted from my notes all cases of glands which have obviously been "sympathetically" affected from contiguous sores, or other obvious causes. The thirty-two cases (or sixteen per cent) in the table were cases of glands presenting a bullet-like

induration, like those affected by a Hunterian chancre; but, at the same time, they were cases where no obvious sore could be discovered. As Lebert (who was, I think, the first to insist strongly upon the specific character of this adenitis, although Ricord and others had noticed its occurrence) remarks, the favourite seat of these indurated glands is generally the posterior part of the neck; the glandulæ concatenatæ, the axillæ, and the groins will, however, often furnish us examples. Their extreme hardness and tenderness, and the fact that they seldom suppurate, but remain as small tender bullet-like bodies for weeks and even months, furnish diagnostic characters. The skin and connective tissue around them do, however, suppurate at times, and the glands themselves occasionally assume a considerable bulk. In adults, this character, and the ugly sores left when the skin gives way, along with the severity of the pain, often give rise to the suspicion of cancer, and I have known them removed for malignant tumours. It seems highly probable that these glands are secondarily affected by syphilitic disease of some part out of sight, but in the track of the lymphatics; of this, however, I can offer no direct proofs. The less done to the glands themselves, or to the skin over them, the better in most cases, but inunction of mercurial ointment, or other specific treatment, will generally be found effective.

PARALYTIC AFFECTIONS.

There are only five cases of these in my notes of the two hundred, or two and a half per cent (not included in the table). Of these, one, that of a female infant, aged four months, must be excluded as doubtful, because almost all the muscles supplied by the musculo-spiral nerve in the right arm were found to be paralysed; and I had reason to believe, as it was said to be congenital, and the labour was a difficult one, that the injury was local, due to some (probably unavoidable) violence in the act of delivery. The other cases were all of hemiplegic type, and as there were other well-marked symptoms of syphilis, as well as a good history, I have no hesitation in recording them. Such cases are not very uncommon, and I have met with more at the London Hospital, in some of which the success or apparent success of treatment was very marked, especially in regard to the general gain of weight and strength, as well as of power in the paralysed limbs. In these cases, the paralysis is often more or less "crossed," especially as regards the face and limbs, sometimes as regards the limbs themselves. In two

of my cases, the right arm and the left leg, and the left arm and the right leg were thus affected; but very often (speaking of such cases generally) the crossing is less obvious, and consists more in weakness of a limb than in absolute paralysis.

MUCOUS TUBERCLES AND AFFECTIONS OF THE ANUS.

So much has been written by special writers on syphilis and on diseases of the rectum, that I content myself with giving the number of cases in the table, only pausing to remark that the mucous tubercles referred to often occurred on the mucous membrane of the mouth, soft palate, and tongue, and that the diseases of the anus, distinguished from them, were cases of fissures and deep ulceration of its mucous membrane, generally associated with the rational signs of disease of the whole of the large intestine. It is, however, due to Dr. Ballard, not to omit mentioning, that mucous tubercles of the anus have, in my practice, occurred in the cleanest and best tended of my cases, where the mothers were careful and cleanly; and that I have never seen a case which could fairly be referred to want of cleanliness, although this is of course a common enough cause of certain forms of eczema. In both these affections, it is very important to combine local treatment with the general. The glycerine of tannin of the British Pharmacopœia, and its zinc and nitrate of mercury ointments, (the latter diluted,) have done much good in many cases; but when I can, I prefer to use Mr. Luke's powder of one part of calomel to eight or more of finely levigated oxide of zinc. The free use of nitrate of silver, especially about the anus, and within it, is, though somewhat painful, a very successful treatment, when combined with internal specific remedies.

MARASMUS AND DEFORMITIES.

These, and some other consequences of syphilis, I have totally omitted from the table, because the former is so often due to other causes, or, if really syphilitic, is in infants less often due to the fever of that disease in the child, than to a vitiated or deficient quality or quantity of its mother's milk, and as regards the latter, particularly hare-lip, I propose to offer remarks elsewhere. I am not one of those who deem that all diseases or disasters can be referred to syphilis. And I will go still further, and say that there are very few, if any, of the so-called sequelæ or signs of syphilis, which are absolutely peculiar to that disease, or diagnostic of its

having previously occurred. But just as cavities in the lung follow tubercles, as mumps is a frequent sequel of measles, as acute desquamative nephritis is a sequel of scarlatina; so, in the adult, certain diseases, as nodes and palmar psoriasis, commonly follow syphilis; and so, in the child who has taken syphilis in utero, in partu, by lactation, or in any other way, certain symptoms, as gummata, typical teeth, and the like, will be met with. My argument is, that it is the accumulation of such symptoms in one individual, which gives us a right to infer the previous disease. On adding together the symptoms I have alleged, it will be seen that each child of the two hundred came under my treatment for at least *three* of the different classes of affections, and this at different times, and excluding all repetitions and mere coincidences. *I have not put down the attacks for which they were treated by other medical men;* in other words, what I have written is what I myself have seen. All the errors of observation are mine, and mine only, though my judgment was often confirmed by my colleagues. But leaving the largest margin which experience of human errors might induce us to do, for faulty diagnoses, we have here the remarkable fact that out of some thousands of children, only about two hundred present certain classes of disease, and enquiry into their history gives clear and unmistakable histories of syphilis in the fathers and mothers, generally in both. Now, since the thousands free from such history and from such symptoms have been equally exposed to dirt, to the exanthemata, and to other causes which might be supposed to explain their attack, why have they escaped? The coincidence is at least a curious one, and I am content to rest my cause upon this, and upon the success of specific treatment.

The candid reader will forgive my frequent introduction of well-known matters, since, for the purposes of my argument, I wished my readers to see the cases (as far as pen and ink would permit) with my eyes, so to speak; or at least to regard them through my spectacles, as in no other way could the truth of my statements be equally well attested, and the truth or error of my explanations be made manifest.