

## CHAPTER XIII.

## INHERITED SYPHILIS.

Inheritance from either Parent, the other remaining sound.—Abortion due to Syphilis.—Date of Appearance of Symptoms.—Symptoms.—Visceral Syphilis.—The Syphilitic Countenance.—Treatment of Inherited Syphilis.

SYPHILIS may be acquired by a healthy baby from nursing a woman with chancre, or mucous patches of the nipple, or through vaccination. When so acquired, the disease is essentially the same as in the adult. It is called infantile syphilis. When inherited, however, its course and symptoms are modified. Syphilis may be inherited from a mother who has had the disease, but does not at the time appear to be suffering from its symptoms; or again, if she become infected at the moment of impregnation, or during gestation up to the end of the seventh month, after which time, according to Diday,<sup>1</sup> the child escapes.<sup>2</sup>

Syphilis may probably be inherited from the father, the ovum becoming poisoned by impregnation with an unhealthy germ, the mother being healthy. As the foetus develops, the mother becomes syphilitic. This point is not yet absolutely decided, certain excellent authorities claiming that, if the mother escapes, so does the child necessarily (*see note, p. 521*). Finally, either a father or a mother may be syphilitic, pass along well into the tertiary stage, and then produce healthy children;<sup>2</sup> or a healthy child may be born while the parents are under treatment, which being discontinued prematurely, a subsequent child may be syphilitic,<sup>2</sup> or, in one of the natural lulls of the disease,<sup>2</sup> the wife not yet having been contaminated, a healthy child may be born; then the father having a relapse, and the mother becoming infected, the next child is syphilitic. A syphilitic mother is far more liable to produce a syphilitic child than a father, who, at the moment of impregnation, may have been under treatment, and for procreative purposes sound; not so the mother, whose intimate anatomical connection with her child during nine months is certain to communicate to it some of whatever poison she may possess, unless she is under continuous treatment.<sup>2</sup>

The ability of a father to infect his child, without at the same time poisoning his wife, has been questioned by high authority. This undoubtedly is of less common occurrence than is supposed, but it may happen. The power of poisoning offspring wanes with the age of the

<sup>1</sup> "De la Syphilis des Nouveaux-nés."

<sup>2</sup> *See note, page 521.*

disease, but not so rapidly, seemingly, as does the power of communicating it to one of the other sex. Thus, with the woman, syphilis may have been acquired from a former husband; with him, as is usual, she miscarries several times. Finally, a child is born with eruptions on its skin, and visceral syphilis, from which it dies in a few days. The next child is born, perhaps, fat and apparently healthy; it continues so for two or three weeks, and then gets the snuffles and cutaneous symptoms. Neglected, it dies, or under careful management gets well. The next child seems healthy, does not develop any marked disease during its infancy, but, growing up, may have the syphilitic teeth, interstitial keratitis, etc. After the birth of this child the husband dies, and the wife marries a healthy man. She has lost her power of communicating syphilis to him. They have a child, who appears and continues healthy, but who, at some time during boyhood, has evidences about the mouth, the bones, or the glands, of mild tertiary disease, the father remaining healthy.

Changing the sex of the foregoing examples, it becomes evident how, late in the disease, after the power of direct communication has been lost, a father, through a healthy, uninfected woman, may beget a child, who, continuing healthy for several years, may finally evince signs of undoubted syphilitic disease, which will yield to appropriate treatment, the mother remaining healthy. Most of these problems of inherited syphilis are still undecided. They are not for the theorist, but for the clinical physician to solve. It is impossible yet to speak with absolute conviction upon some of them.

ABORTION DUE TO SYPHILIS.—A syphilitic woman usually aborts. If no treatment be employed, abortions continue, perhaps at later and later months, until finally a living child, with inherited syphilis, is produced. When a woman who is distinctly syphilitic becomes pregnant, a continuous mild mercurial course offers her the best chance of bringing a living child into the world. The causes of abortion do not seem to lie in syphilitic disease of the womb, but in a blasting of the vitality of the foetus, through visceral syphilitic disease, and through fatty degeneration of the placenta (Barnes).

DATE OF APPEARANCE OF SYMPTOMS.—The date at which the syphilitic poison may manifest itself in an infant who has inherited it is variable. The germ may be blighted, and early or late abortion ensue; the child may come into the world covered by an eruption and with advanced syphilis of the liver, thymus, etc. Most often, however, the child is born seemingly healthy, but fails to gain weight, and develops an eruption, with snuffles, etc., somewhere during the third or fourth week. It may be two or three months before positive signs appear, but this is rare, and much more uncommon, though still possible, is the lapse of several years before symptoms come on. Cases are not very infrequently encountered where a growing or full-grown child first presents



evidences of syphilis, the disease being unmistakably inherited, perhaps the father known to be syphilitic, yet neither the child nor the mother can be brought to confess directly or indirectly any antecedent syphilitic disease. That there may have been some undiscovered symptom in babyhood must be allowed, but still it is as near a certainty as possible, without absolute proof, that a child of a parent whose syphilis has nearly run out, may show no signs of disease until many years after birth, and then the lesion will be of a bone, a joint, a gland, the eye, or perhaps there will be a patch on the mucous membrane of the buccal cavity, an ulcer of the nose resembling lupus (Case LL), or some other single localized lesion, usually passing undiagnosed as far as its etiology is concerned. These symptoms were often designated by the older surgeons by the somewhat vague term of "strumous," as evincing characteristics which were not absolutely identical with those of scrofula. The popularity of Astley Cooper's well-known tonic for struma, in early childhood (corrosive sublimate in Huxham's tincture of bark), is probably explained in this manner.

**SYMPTOMS OF INHERITED SYPHILIS.**—A child born with inherited syphilis often manifests no evidences of the disease at the time, unless it be that he has more of the weazened, old-man look, and dried-up appearance, than is common with babies at birth. This condition may hold for several weeks, or months, before eruptions appear. The infants in the mean time do not take on flesh, they continue thin, the skin becomes more sallow, dry, and wrinkled, they look bloodless and mummified, the eyes seem large, and the expression is one of aged, unearthly, half-idiotic intelligence.

Before affairs have reached this pass, the junction of the skin with the mucous membrane at the different mucous orifices usually begins to show some signs of disease. Fissures, chaps, excoriations, mucous patches, ulcers, appear about the lips, in the mouth and throat, at the edges of the nose, around the anus, genitals, and buttocks, groins, axillæ, umbilicus, etc. The child gets the snuffles; its nose first runs, and then becomes stopped up by the swelling of the membrane and the collection of mucus, pus, and blood. If the nose is entirely stopped, nursing is interfered with. The disease may go on in bad cases to ulcerative destruction of the cartilages and bones of the nose. This nasal inflammation sometimes extends downward through the pharynx into the larynx, occasioning a hoarseness of the cry often observed in syphilitic children. Great or small (mucous) patches of livid excoriation appear on the buttocks, legs, and trunk, oozing a little thickish fluid, which partly scabs into a dark crust; perhaps these patches become the seat of true ulceration, especially around the anus and in the groin. Among the scabbed excoriations and scattered patches may appear a roseolar eruption, the tint of which is particularly livid, and soon assumes the coppery-brown. Usually there are papules scattered

through the eruption, either small and acuminate, or broad and flat; the latter in convenient situations, kept moist and warm by being overlapped by skin, become mucous patches. Papules appear by preference about the palms, soles, and buttocks. Subcutaneous tubercles are seen in some cases. Pustules are not wanting in feeble children, but the excoriation and mucous patch of the skin are most common and most characteristic.

*Infantile pemphigus* is encountered in syphilitic children. That it may occur from simple cachexia, without any virulent cause, has been hotly contended, and is exceptionally correct, but it is vastly more common to find it upon syphilitic subjects. It indicates a bad type of disease. The child may be, and not infrequently is, born with it, or it may come out with other manifestations of the disease some days after birth. It consists in bullæ, varying in size from a pin's-head to a penny—usually about as large as a split pea—filled with sero-pus, which rapidly becomes purulent, situated upon a reddened, excoriated base, surrounded by a red areola, which latter is sometimes slightly thickened and raised. When the bullæ burst, thickish scabs with a green tinge form, and underneath them ulceration goes on.

The palms and soles are the favorite seats of syphilitic pemphigus, but in bad cases the eruption spreads from these points until it may cover the entire body. Almost all cases die, though occasional recoveries have been noted.

The nails in children do not suffer from syphilis so often as they do in adult life, yet they are not exempt. The best description of the changes in the nails in children is given by Hutchinson;<sup>1</sup> one or more nails on each hand split and become dry, cracked, jagged. The matrix may suppurate, and the nails be shed several times. The affection is very rare. It runs a chronic, obstinate course.

The eyes of young infants do not suffer very often, except from conjunctivitis in connection with the coryza.

The testicles usually escape, but may become the seat of gummy deposit.

The bones, except of the nose, are not often involved in the first series of troubles of the infant. If it survive these, later on bony lesions develop just as in the adult, nodes of the skull, clavicle, tibia, etc., and other periosteal and interstitial bony lesions. Induration in the shafts of the long bones of children, and a softening of the cartilages at the epiphyses, tending to terminate in suppuration under the periosteum, are met with upon syphilitic children, and were first pointed out by Bouchut<sup>2</sup> as due to syphilis.

**VISCERAL SYPHILIS IN CHILDREN.**—Of more importance than the lesions already alluded to, is the visceral syphilis of young children.

<sup>1</sup> "Pathological Transactions," vol. xii., p. 259.

<sup>2</sup> "Maladies des Enfants nouveaux-nés," 1861.



Their tender organs, blighted in the bud, in the early stages of the disease, while cutaneous symptoms are still superficial, readily take on interstitial proliferation of connective tissue, and gummy change, which properly (in the adult at least) belong to the later manifestations of the disease. Even the brain and cord do not escape. Schott<sup>1</sup> gives a positive example where a gummy tumor of the liver, and another under the anterior cerebral lobes, were found in a syphilitic child born before term with pemphigus of the palms and soles. Case XXVII. of Van Buren and Keyes<sup>2</sup> is that of a boy with inherited syphilis, who had an eruption at three weeks. During the fifth year, nodes on the tibia and ulna, and two slight attacks of syphilitic paraplegia.

Some cases of hydrocephalus are believed to have been due to inherited syphilis. Gros et Lancereaux, De Méric, Roger, Hutchinson, Lancereaux, and Hill,<sup>3</sup> give cases of idiocy with inherited syphilis. Several cases of severe nervous syphilis with inherited disease are reported by J. Hughlings Jackson.<sup>4</sup>

The internal organs most frequently found affected in children dying with inherited syphilis are, the thymus, liver (where Thiry, Wedl, Zeissl, Shott, Lancereaux, Testelin, and others, have observed gummy tumor in inherited disease), lungs less often; peritonæum, kidneys, spleen, brain, cord, etc. The lymphatic ganglia are liable to enlargement in inherited syphilis (Hutchinson, Lancereaux, Rivington), and the suprarenal capsule does not escape (Huber, Hennig). The changes occurring in these organs have already been detailed in connection with similar lesions in the adult. The testicles suffer in inherited as well as in acquired disease. The lesions have been detailed (p. 432). The authors have seen a case, as have Worth,<sup>5</sup> Bryant,<sup>6</sup> and others.

Lancereaux,<sup>7</sup> referring to cases by Förster, Eberth, Roth, and Oser, describe an enteritis as an essential evidence of hereditary syphilis in new-born children. The lesions are rounded indurations of variable size, situated upon the surface of Peyer's patches, and on the solitary glands, some covered with smooth mucous membrane, others ulcerated deeply. The mass shows, on section, numerous small round cells and connective-tissue hyperplasia.

The thymus in syphilitic babies is nearly always diseased (see page 643).

*The prognosis* in inherited syphilis is bad, just in proportion to the date of appearance of the symptoms, and the general physical condition of the child. Nasal catarrh, if severe enough to hinder nursing, vomiting and diarrhoea, as interfering with nutrition and indicating implication of the liver, make the prognosis worse. If a child is born with a general eruption, death is almost inevitable.

<sup>1</sup> "Jahrbücher der Kinderheilkunde," 1861.

<sup>2</sup> *Loc. cit.* <sup>3</sup> Page 224.

<sup>4</sup> "The Transactions of St. Andrew's Medical Graduates' Association," vol. i., 1868.

<sup>5</sup> *Medical Times and Gazette*, 1862.

<sup>6</sup> *Ibid.*, 1863.

<sup>7</sup> *Op. cit.*

THE SYPHILITIC COUNTENANCE.—To Mr. Hutchinson<sup>1</sup> the profession is indebted for the development of many important and interesting facts in connection with the subject of congenital syphilis, especially as indelibly stamped upon the individual after his earlier childhood. These appearances, until Hutchinson called attention to them, had either been ignored, unobserved, or attributed to scrofula. They are briefly these.

A child who has inherited syphilis, who perhaps has never shown marked evidences of the disease in babyhood, becomes somewhat blighted in his development. His skin is coarse, earthy, pallid, perhaps showing cicatrices. He has a squared face, prominent cheek-bones, overhanging forehead, and a sunken bridge to his nose. He looks prematurely old and grave, and may have chronic catarrh, interstitial keratitis, ulceration of the throat, or cicatrices of the mouth or soft palate. The permanent teeth are irregularly set and defective, especially the two middle upper incisors, which Hutchinson calls the "test-teeth." These are small, often converging, sometimes diverging. The cutting-edge of the teeth is sometimes narrowed, rounded off, whence the name "pegged teeth." They are stunted and badly developed, often marked with seams (lines, ridges) in front, and of a dirty-brownish color, but their chief peculiarity is found in their edges, which, being thin when cut, break off centrally, leaving a "broad, shallow, vertical" notch on the lower border of the tooth. This becomes smoothed down with advancing years, but the size and shape remain to indicate a blighted tooth. Not all children with inherited syphilis have these teeth, but many do, and the sign is well worthy to be carefully watched for. It not infrequently happens that one child of a family has the notched, pegged teeth, while brothers and sisters born afterward escape, yet still any of these latter may late along in childhood develop some periosteal thickening, some indurated scaly patch on the skin, or mild, raised, excoriated, insensitive patch of thickening on the mucous membrane of the mouth, which the practised eye and touch recognize as syphilitic, and which melts away, under the magic treatment boldly administered, like snow before a summer's sun.

*Treatment of Inherited Syphilis.*—Before a child is born, if there is reason to believe that it is syphilitic, its treatment should be commenced by bringing the mother mildly under the influence of mercury. In this way abortion may be averted, and the child's life saved.<sup>2</sup> A positive effect of mercury should be aimed at, without, if possible, producing any diarrhoea or intestinal irritation, which are recognized by most observers to be in themselves efficient causes of abortion. Consequently the proper treatment for a syphilitic pregnant woman is inunction.

By common consent also, the treatment of the child is by inunction. The oleate of mercury, five to ten per cent., may be used, in place of the

<sup>1</sup> "Means of recognizing the Subjects of Inherited Syphilis in Adult Life," *Medical Times and Gazette*, September, 1858, p. 265, and art. "Reynolds's System of Medicine."

<sup>2</sup> See Thurmann's case, note, page 52.



more irritating mercurial ointment, by Brodie's well-known method, being spread upon a flannel belly-band, or it may be alternated between the soft skin in the flexures of the axilla, elbow, and knee. The quantity should be decreased as soon as the symptoms begin to yield, and the inunctions continued for many months after the disappearance of all symptoms. Gray powder is largely used in infantile syphilis, in doses of the fraction of a grain, but there is every objection to internal treatment, as being uncertain in dose (even a healthy infant constantly regurgitates and vomits), and liable to irritate. There is no conceivable objection to inunction, even if the body were one vast ulcerated mucous patch. The extra care required for the inunction would have to be given to the child in any case. If the infant survives a few months, iodide of potassium may be administered through its nurse. Locally the sores require only cleanliness, with (in special cases) some ointment or dusting with calomel and iodoform.

*H. Coatsworth*

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