AN ADDRESS

ON

SYPHILIS AND ITS EFFECTS UPON THE
CIVIL POPULATION OF GT. YARMOUTH
AND OTHER MARITIME TOWNS.*By C. PALMER, M.R.C.S.E.,
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I HAVE decided to call your attention to the subject of syphilis, and its effects upon the civil population of Great Yarmouth and other maritime towns similarly situated, simply because I am deeply concerned at the number of such cases constantly coming under my observation, and its disastrous effects upon life and health; and am anxious that we should initiate a movement having as its object a full inquiry into the subject, and the means which should be adopted to mitigate its ill effects.

In illustration of the points to which I wish to call your attention, I have collected a number of cases, which I have divided into three series. The first consists of married couples with families; the second of cases of congenital syphilis; and the third a mixed group containing cases of primary, secondary, and tertiary syphilis. And before proceeding further, I must apologise for the very imperfect manner in which I have treated the subject, owing much more to the want of time than any lack of material.

SERIES I. Married, with Families.—The first series comprises 114 families, and 230 adults, assuming that, when a number of children are born syphilitic, both parents are, or soon become, affected.

GROUP 1. Infected Years after Marriage.—Of these, 25 families were infected some years after marriage, and in all these cases infection took place through the husband; they had 64 children before infection, of which number 57 are now living; three of those who died were over 10 years of age, and one 28; so that the actual infantile mortality was about 9 per cent.; 109 children were born after infection; of these, 75 died in infancy, or about 66 per cent.; and of the remaining 34, the majority were weakly, stunted, and suffered from infantile syphilis.

GROUP 2. Infected at Marriage, or soon after.—Eighty-four families were syphilitised at or about the time of marriage. In all these cases, where the disease could be traced to its source, the husband had suffered from syphilis before marriage, generally from six months to two years. In many instances, he had no symptoms of primary or secondary syphilis about him at the time of marriage; indeed, this was the rule. Sometimes the mother complained of sore-throat or other symptoms of secondary syphilis during her pregnancy, but very frequently the mischief was not suspected until the first child became syphilitic. These had 325 children born, of which number 155 are now living, and 175 died in infancy; the mortality being about 55 per cent. of the children born—a marked improvement upon the first group of this series, which is mainly due, no doubt, to two circumstances: 1st, that the parents are younger; and 2nd, that in some, perhaps many, instances marriage did not take place until some time after infection.

GROUP 3. Tertiary and Congenital Cases: Married.—Amongst the remaining cases are two, one male and one female, who at the time of marriage were suffering from tertiary symptoms. These have eleven children, all living and apparently healthy, and one miscarriage. Three had congenital syphilis, two females and one male; here the children were, with one exception, healthy.

With regard to treatment, I am convinced that a long course of small doses of mercury—say, a grain of blue pill once a day for six or twelve months—will generally so far modify the disease, that the children born after will be viable, if not to all appearance healthy; though the parents themselves will still be liable to relapses in a milder form. Treatment by iodide of potassium does not appear to effect any good in this way, though it cures the local disease.

In corroboration of this opinion, on referring to my two sets of private and hospital cases, I find that, in the private cases, most of which were treated sooner or later, the infant mortality was 50 per cent.; whilst in the hospital series, where there is at least no record of treatment, it is 66 per cent. And, if I select from my own list those cases which I know to have been treated with mercury, the difference is still

*Read before the East Anglian Branch.

more marked, for the figures stand thus: 12 families, 62 children born, 40 living, 22 dead; but, to show clearly the effect of the treatment, I ought to subtract from this number 14 children who were born syphilitised before treatment was commenced, and who all died. The figures would then stand thus: 12 families, 48 children born, 40 living, 8 dead, or a mortality of 16½ per cent.; a very encouraging result if confirmed by other observers.

The disease, when not treated by mercury, dies out of itself, I am afraid, very slowly, and generally lasts through nearly the whole of the procreative period; and I incline to the belief that a man or woman once syphilitised, remains so to the end of the chapter; and that the power of procreating healthy children is not regained until very late in life, though there are cases which tend to prove that a woman suffering from secondary syphilis may give birth to healthy children, if the father be healthy; instance: one case in this series, where the woman was syphilitised by her first husband during pregnancy (about the fifth month), that child was syphilitic, but recovered; the next was syphilitic, and died; the husband then died; and, two years after, she married again, and a year after that had a child, apparently healthy, though she herself was suffering from secondary syphilis at the time, and has since become paraplegic. At all events, as it appears to me, the disability is of much longer continuance in the male than in the female.

Sometimes, no doubt, we find that, though before marriage a man may be so far recovered as to beget a fairly healthy viable child, yet, in consequence of the mother's liability to become affected by the fœtus, the ordinary sequence is inverted, a gradual deterioration takes place in the offspring, and the later children are the most affected. On the other hand, actual sterility (I suppose from ovaritis or metritis) is a much more common result of primary syphilis in the female than the male; indeed, I suspect that by far the larger proportion of women who marry after leading irregular lives are thus rendered incapable of impregnation. Yet this condition may be removed by time, and perhaps by treatment, as we frequently find that women of this class, after being sterile for eight, ten, or even fifteen years, give birth to children viable, if not altogether free from disease.

SERIES II. Congenital Syphilis.—The next series consists of cases of congenital syphilis; a subject of such importance, that I am only sorry that want of time has prevented my collecting more cases, or making better use of those already at command. To have gone into the subject thoroughly, I should have traced out the histories of the two hundred children in the first series born of syphilitic parents and still living, but that I have not yet been able to do, and I have only the 146 cases in the series before us as ground for conjecture as to what will be their ultimate fate. I have divided this series into three groups: those who are married and have families; unmarried adults, or married without children; and thirdly, children.

GROUP 1. Married, with Families.—In the first group there are seven, six women and one man. They are all young, their ages averaging only twenty-six years, the youngest being twenty, and the oldest thirty-seven years. They have had in all fourteen children, of whom thirteen are living, and apparently healthy; the fourteenth died at three months, and had papular rash, snuffles, sore mouth, and excoriated nates; the father, aged 23, has notched teeth, has had keratitis, and has now psoriasis; he has had two children since, who are living and well. These cases are all well marked examples of congenital syphilis; all had notched teeth and scars about the angles of the mouth, and four had had keratitis.

GROUP 2. Married without Children, and Unmarried Adults.—The second group contains 21 cases, 19 females and 2 males; 17 had notched teeth, 14 had had or were suffering from keratitis, 7 were deaf, 1 had necrosis of the superior maxillary bones, 1 had psoriasis, 10 ulceration of skin, 5 had ulceration of the soft palate or pharynx, 1 had epilepsy, and 3 suffered from severe headache; none suffered from any disease of the heart, lungs, or genital organs but one, who had chancre, whether hard or soft was not noted.

GROUP 3. Children.—The third group contains short notes of 105 cases, with 29 deaths; of these, 59 suffered from skin-affections, viz.: 53 psoriasis, with 23 deaths; 2 purpura, 1 death; 2 pemphigus, 2 deaths; 2 eczema, no death. The eyes were affected in 18 cases, viz.: 9 had purulent ophthalmia, 5 had keratitis, 2 phlyctenular ophthalmia, 2 tinea tarsi. Deafness was noted in only 3 cases. The bones and periosteum were affected in 11 cases as follows: 7 had periostitis, 2 rickets, 1 caries, 1 necrosis; none of these terminated fatally. In 27 cases, the mucous membranes were affected; of these, 7 died, a mortality of about 25 per cent., which, compared with the skin-group, where the death-rate is 50 per cent., leads to the inference that affections of the mucous membrane are of less serious import than those of the skin. Of these, 10 had snuffles, with 7 deaths; 2 had lupus of the nose, which with one was associated with ulcerations of the tongue,

palate, and pharynx; 7 had condylomata around the anus (all these recovered). The brain was affected in 20 cases: of these, 2 had chronic hydrocephalus, with 1 death; 7 convulsions or epilepsy, with 3 deaths; 13 laryngismus, all of which recovered with the exception of 2, which were complicated with convulsions; 2 cases of epilepsy were idiotic, and 1 imbecile. In 6 cases, the liver was affected; 3 of these died dropsical.

From this imperfect series of cases (imperfect because they were not taken with any particular object in view at the time, but as cases are taken in everyday practice, with only what appears at the time to be the salient points briefly noted), I gather that pemphigus is generally fatal; that psoriasis is fatal in about 50 per cent. of the cases in which it is manifested in infants (but when mucous tubercles round the anus made their appearance during its progress the cases all recovered); and the same may be said of laryngismus, of which complication there are 7 instances.

Of the eye-affections, purulent ophthalmia stands first; and this affection was so common, that its appearance would always arouse in my mind a suspicion of a syphilitic taint. One case of keratitis is put down as occurring as early as fifteen months, but I cannot remember the particulars. As to the cases of phlyctenular ophthalmia and tinea tarsi, I should certainly have attributed them to other causes had not the family history been eminently syphilitic.

Periostitis made its appearance as a rule very early, in one instance only three weeks after birth. All the cases recovered; and I think that its appearance is an indication that the syphilitic virus is diminishing in intensity. These cases appear to me to be closely allied to rickets; indeed, I feel sure that many of them become so; but here my notes are deficient, as I find that I have only two cases marked rickets.

Of the affections of the mucous membranes, the cases of snuffles were probably all associated with psoriasis; and the fact of the mortality in these cases being reduced from one-half to one-third would lead to the conclusion that the complication was not unfavourable at least.

The two cases of lupus deserve attention, as they certainly occurred in eminently syphilitic families.

The large percentage of cases in which the brain was affected is, to my mind, a fact of the greatest importance, as indicating the direction the manifestations of disease will take later in life; for, as few of these cases were fatal, it follows that at least 25 per cent. of the survivors—and I myself think this is far below the true average—have, at some time or other, suffered from symptoms of brain-mischief; and accordingly I am afraid that, when the subject is fully inquired into, we shall find that more nearly seventy-five than twenty-five per cent. of these unfortunates, after attaining to puberty, suffer from infirmities, bodily or mental, due to imperfect or diseased conditions of the brain.

Affections of the liver, apart from the earlier manifestations of infantile syphilis, appear to occur in about the proportion of 6 per cent. of all cases, which would be nearly 12 per cent. of those surviving the period of first dentition, and of these cases about 50 per cent. prove fatal.

A few other questions occur to my mind in connection with the subject of congenital syphilis. The first is, at what age does it cease to be communicable? We know that infantile syphilis can be communicated to either children or adults, and that the disease so produced, in its appearance and effects, closely resembles the true Hunterian chancre; but can it be transmitted, like the acquired disease, by the father to the offspring, and to the mother by the *fœtus in utero*? I suspect that this is possible, but takes place very rarely. Is the disease taken from a syphilitic infant of a milder type than that acquired in the usual way? Are congenital syphilis, and the disease it gives rise to, protective? and does soft chancre bear the same relation to hard chancre that modified small-pox after vaccination does to true small-pox? These queries, I am inclined to think, will be eventually, if they are not already, answered in the affirmative.

SERIES III. *Mixed*.—The third series, which is relatively unimportant on account of the small amount of information it contains, has records of 76 cases.

GROUP 1. "*Primaries*."—Of these, 20 are primary; and these may be useful in assisting us to arrive at a correct conclusion as to the probable sources of infection in the first series. Of these 20 cases, 16 are men, and only 4 women; the men are, with two exceptions, very young, and unmarried, their average ages being only 20½ years; whereas the women are all leading irregular lives, and are much older, their ages averaging 31 years; which facts point to the same conclusion that I have before arrived at, that the source of infection in that series is almost invariably the husband.

GROUP 2. "*Secondaries*."—The second group contains only 9 cases, 4 males and 5 females; and here again the relative difference

of age is maintained—the ages of the women averaging forty years, and of the men thirty-three years.

GROUP 3. "*Tertiaries*."—The third group contains 47 cases; and here the figures are reversed—the average age of the women being thirty-nine years, while that of the men is forty-four and a half. And, if we take into consideration the date of infection as well, we find the explanation of this; for the average lapse of time from the date of infection to the appearance of the disease is in men seventeen years, whilst in women it is only eleven years; from which I think we may infer that the disease runs its course more rapidly in women than in men, and sooner arrives at the tertiary stage, when the offspring are not visibly affected by it.

Numerically, this group is insufficient to give more than a very imperfect outline of the manner in which acquired syphilis is likely to manifest itself as the subjects of it advance in life; still I think it is sufficient to indicate the class of diseases to which they will be liable.

On analysing this table, I find that in about 35 per cent. of the cases the bones or periosteum are affected, the skin or subcutaneous tissue in 25 per cent., and the mucous membranes in about the same proportion; the brain is affected in about 14 per cent., the aorta in 4 per cent., the lungs in 4 per cent.; whilst cancer and albuminuria occur as sequelæ in the proportion of 2 per cent. of all cases. But nearly all these affections of different tissues bear a close resemblance to each other in one important particular; they all have a tendency to end in disintegration and death of the tissues affected; and this tendency, so strongly marked in the tertiary, and almost absent in the secondary group, is due, I think, to the fact that, in this stage of the disease, the arteries are first affected, and the parts which derive their blood-supply from them only secondarily; or, in other words, that in acquired syphilis, in its later stages, the force of the disease falls principally upon the circulatory system; whilst in the congenital disease the brain and nervous system are chiefly affected.

This finishes the consideration of the three series of cases upon which I have to base my calculations as to the prevalence of syphilis in this borough. I will now sum up, as briefly as I can, the conclusions at which I have arrived on this and other points of interest. The papers before you contain notes, though brief and imperfect, of 364 cases of syphilis in adults, and 484 in infants and children—in all, 848 cases; but I am sure that, if I had had time to record all the cases that have come under my notice during the last two years, I should have had at least one-fourth more—say 1,063 cases, all told. From this, I deduct 266 recorded as dead, with one-fourth added, equal to 232, which will leave 731 now living, as far as I know; and, if I take this number as representing one-tenth of the actual number of people tainted with syphilis in the borough, you will, I think, agree with me that this is rather an under than an over estimate (as it is not probable that nearly one-tenth of those affected have come under my notice at all; nearly all the cases of primary syphilis amongst the poorer classes being treated by the chemists, or not at all, except by recipes which they get from one another. For the most part, they have no idea that the affair is of any consequence, or requires further treatment than a bottle of black wash; and, when questioned, will tell you that they have never had the *bad* disorder, but only a chancre).

Indeed I may say that, practically, three large classes of syphilitics are unrepresented—the single men and women, the prostitutes, and the married couples who are sterile, in which class we frequently find that the women become syphilitic through the semen, without evidence of pregnancy having ever taken place. This estimate will give a total of 7,200 people, tainted with syphilis, in a population of 45,000—six-tenths of which will be cases of acquired and four-tenths of congenital syphilis, to which must be added 3,000 deaths amongst infants, which have taken place during the last twenty years (on an average, about 150 a year), of which number somewhere about 40 per cent. have been either still-born, or have died a few hours, or it may be days, after birth, and 60 per cent. in infancy; and, how have they died? Nearly all of them we know most wretchedly; worn to skeletons, their skins thin as parchment, withered and wrinkled, and covered with sores and blotches; their mouths and lips disfigured by painful ulcers, which prevent their taking proper nourishment, or getting rest day or night. Such ghastly incarnations of hopeless misery, that they remind you more of the denizens of Dante's hell than anything human. In order to estimate, roughly and imperfectly I grant, the prevalence of this disease in other maritime towns constituted as ours is, with a large fishing population, I shall take, as a basis for calculation, the number of men and boys employed in the fishing-boats. Here they number about 6,400, or one-seventh of the whole population; whereas, the number employed in the same way in England, Wales, and Scotland is 105,000, which, multiplied by seven, will give a mixed population, constituted no doubt very much like our own, of 735,000, of which

number about 119,000 would be tainted with syphilis, with an annual death-rate amongst infants directly caused by syphilis of 21 per 1,000 of the infected part of the population, or 4 per 1,000 of the whole—a condition of things so disgraceful to humanity and civilisation, so utterly disastrous and intolerable, that, in my opinion, to be cognisant of, or even to suspect it, without taking steps to remove it, is little short of a crime; and we shall be ill performing our duties, as guardians of the public health, if we do not at once take active steps to mitigate, as far as possible, this monster evil, which is so fearfully undermining our strength, energy, and mental capacity as to endanger our position as a nation.

The British Medical Association, counting as it does about 9,000 members, with Branches in all the principal towns in the kingdom, appears to me to be admirably adapted for the work of thoroughly elucidating the subject; and demonstrating, in a manner that no number of individual members ever could, let them be ever so acute or untiring in their zeal, not only the actual prevalence of the disease, but its ultimate effects as well, in these two great classes—viz., acquired and congenital; and, by this, I mean not only its direct effects, but its influence upon the death-rate, etc., in other diseases, to which all classes are liable; its share in the causation of other diseases—as cancer, lupus, rickets, granular kidney, and perhaps many others; and, lastly, the effects of other diseases in modifying the progress of syphilis.

We have, thanks to the acumen and untiring industry of such men as Hutchinson in England, and many others abroad, charts laid down to guide us in our investigations; and I hope that, before we part to-day, we shall carry one or both of the following resolutions.

“1. That it is, in our opinion, imperative that steps should at once be taken to investigate the subject of syphilis in all its bearings, more particularly in the large mercantile and maritime towns.

“2. That, to accomplish this, the British Medical Association be requested to form a central committee, with powers to appoint local committees in such places as they think desirable; such local committees to consist, not only of the members of the Association, but of all medical men resident in the place or neighbourhood, who are willing to assist in the work; to lay down the lines upon which these committees are to work, and to receive and digest their reports.”

And I am sure that, if these propositions are carried and acted upon, we shall soon be in a position to arouse the earnest attention of the Government; and our Association will have commenced a work which must eventually be of inestimable service, not only to our own country, but to all civilised nations. But, for this inquiry to be full and complete, it will be necessary, as I have done throughout, to assume, until the contrary is proved, that a man or woman once syphilitic is always syphilitic; and, secondly, that the children of syphilitic parents are also syphilitic; and their behaviour, under all the varying conditions of life, in health and disease, carefully noted and compared with that of the rest of the community who are presumed to be free from this taint: for I am sure that, by such means only, can we ever arrive at even an approximative estimate of the amount of mischief wrought by this disease.

Another question, full of interest and of the greatest importance, is, what are the main sources of infection and what the channels through which it is disseminated through our towns, and villages too, in maritime populations like ours, which draw a considerable proportion of their sailors and fishermen from the surrounding country? And this question is, I think, fairly answered by the first and third series of cases; for they appear to me to prove clearly that, practically, the prostitutes are the main sources of the mischief; and the sailors (young, and for the most part unmarried at the time of infection) the principal means by which it is disseminated throughout our civil population with such deadly effect. And this brings me to a consideration of the means at our disposal to diminish the evil, if not to eradicate it; and if, in doing so, we consider as proved the following points: that practically the prostitutes are the source of the mischief, and the young unmarried men the means by which it is disseminated, and that the fruitful causes of this dissemination are inefficient treatment before marriage, and marriage too soon after infection, it follows that it is of the first importance to reduce the amount of disease amongst prostitutes to a minimum; and, to fulfil this indication, the Contagious Diseases Prevention Act, without going into the question of its merits and demerits, appears to be well adapted; it works well in the towns where it has been applied, and has undoubtedly diminished the number of prostitutes as well as the number of infections; and no doubt its good effects would be still more marked were its application more general; whilst, if it is necessary for the protection of our army and navy, it is doubly so for that of our civil population, where the number affected is so much greater, and the consequences so much more terrible; but, at the same time that I

advocate the more extensive application of the Contagious Diseases Prevention Act as a means of mitigating the evil, I do not wish to lose sight of the fact that, promiscuous intercourse being the cause of the spread of syphilis, rationally the effectual way of preventing it is to, as far as possible, get rid of the cause.

Next to this in importance is provision for the early and effective treatment of all cases of infection, and the repression, as far as possible, of all irregular treatment by chemists or quacks; whilst, to fulfil the last indication, viz., the prevention of marriage too soon after infection, I think that a system of registration might be devised, and a certificate required from all infected persons before marriage, that they have been properly treated, and a fair time has elapsed since the disease was contracted. But I feel that this subject is beyond the scope of my paper, which is, I know, only a very imperfect outline of what it ought to be; but, if it have the effect of directing your attention to the subject, it will have answered the purpose for which it was written.

REMARKS

ON

ADENOID VEGETATIONS OF THE NASOPHARYNX.

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I PROPOSE to make a few practical remarks on adenoid vegetations of the naso-pharynx, a subject which, although it has been carefully studied by specialists, both of the throat and of the ear, has, from its comparatively recent discovery, attracted very little attention amongst the profession at large—at least, in this country. The merit of first accurately describing this affection is due to my friend Dr. L. Meyer of Copenhagen, who, in his monograph published in the *Archiv für Ohrenheilkunde*, and in a paper in the fifty-third volume of the *Medico-Chirurgische Transactions* (1870), has given an exhaustive account of the pathology, diagnosis, and treatment of these growths. A copious literature, almost entirely from the pens of continental authors, has followed Meyer's original work, and has culminated in the elaborate discussion on the subject at the recent International Congress. My own interest in the matter dates from the year 1874, when, being on a visit to Copenhagen, Dr. Meyer kindly showed me the first case in which he had operated for the removal of these growths. During the last two and a half years my attention has been more particularly drawn to them, and I have found that they are by no means of rare occurrence in this country.

Pathology.—The pathology of the disease is simply a hypertrophy of the adenoid tissue, occupying the posterior wall and roof of the naso-pharynx (“pharyngeal tonsil”), giving rise to soft tumours of varying shape and size projecting into that cavity. Two chief forms are recognised by Meyer, viz., the *cristate* and the *cylindrical*. The former, which in my experience are the most common, occupy the posterior wall near the roof of the naso-pharynx. The latter are found on the sides of the cavity, and are probably unconnected with the pharyngeal tonsil. Hypertrophy of the pharyngeal tonsil also often assumes the character of a soft elastic cushion on the posterior wall, with a surface of more or less uneven character. The structure of the vegetations, as their name indicates, is that of adenoid or lymphatic tissue, containing a large number of blood-vessels.

Etiology.—With regard to the etiology of these growths, little definite is known. They may, according to Woakes, be congenital, and the influence of heredity as a cause is insisted on by Meyer. He also mentions as occasional causes colds, measles, and local irritation (such as occurs in cleft palate). In several of my own cases, the accompanying deafness was attributed to scarlatina; and it is quite possible that the hypertrophy of the adenoid tissue may have been due to the same cause. On the other hand, as Meyer suggests, the presence of adenoid vegetations may be an additional element of danger to the ears during an attack of measles or scarlatina.

Symptoms.—The symptoms of the disease are very characteristic, and, when once seen in a well marked case, can hardly fail to be recognised again. They are due chiefly to the mechanical obstruction of