

be made of the throat and skin for signs of old lesions. Scars in the groins, the result of buboes, may be taken as positive evidence of infection (Hutchinson). The cicatrices on the legs are often copper-colored, though this cannot be regarded as peculiar to syphilis. The bones should be examined for nodes. In doubtful cases the scar of the primary sore may be found, or there may be signs of atrophy or of hardening of the testes. In women, special stress has been laid upon the occurrence of frequent miscarriages, which, in connection with other circumstances, are always suggestive.

In the congenital disease, the occurrence within the first three months of snuffles and skin rashes is conclusive. Later, the characters of the syphilitic facies, already referred to, often give a clue to the nature of some obscure visceral lesion. Other distinctive features are the symmetrical development of nodes on the bones and the interstitial keratitis.

In doubtful cases much stress is laid by some writers upon the therapeutic test, by placing the patient upon antisymphilitic treatment. In the case of an obstinate skin rash of doubtful character, which has resisted all other forms of medication, this has much greater weight than in obscure visceral lesions. I have on several occasions known such marked improvement to follow large doses of iodide of potassium that the diagnosis of syphilitic lesion was greatly strengthened, but the subsequent course and the post-mortem have shown that the disease was not syphilis.

**Prophylaxis.**—Irregular intercourse has existed from the beginning of recorded history, and unless man's nature wholly changes—and of this we can have no hope—will continue. Resisting all attempts at solution, the social evil remains the great blot upon our civilization, and inextricably blended with it is the question of the prevention of syphilis. Two measures are available—the one personal, the other administrative.

Personal purity is the prophylaxis which we, as physicians, are especially bound to advocate. Continence may be a hard condition (to some harder than to others), but it can be borne, and it is our duty to urge this lesson upon young and old who seek our advice in matters sexual. Certainly it is better, as St. Paul says, to marry than to burn, but if the former is not feasible there are other altars than those of Venus upon which a young man may light fires. He may practise at least two of the five means by which, as the physician Rondibilis counselled Panurge, carnal concupiscence may be cooled and quelled—hard work of body and hard work of mind. Idleness is the mother of lechery; and a young man will find that absorption in any pursuit will do much to cool passions which, though natural and proper, cannot in the exigencies of our civilization always obtain natural and proper gratification.

The second measure is a rigid and systematic regulation of prostitution. The state accepts the responsibility of guarding citizens against small-pox or cholera, but in dealing with syphilis the problem has been

too complex and has hitherto baffled solution. On the one hand, inspection, segregation, and regulation are difficult if not impossible to carry out; on the other hand, public sentiment, in Anglo-Saxon communities at least, is as yet bitterly opposed to this plan. While this feeling, though unreasonable, as I think, is entitled to consideration, the choice lies between two evils—licensing, even imperfectly carried out, or wide-spread disease and misery. If the offender bore the cross alone, I would say, forbear; but the physician behind the scenes knows that in countless instances syphilis has wrought havoc among innocent mothers and helpless infants, often entailing life-long suffering. It is for them he advocates protective measures.

**Treatment.**—We must admit that various organizations react very differently to the poison of syphilis. There are individuals who, although receiving brief and unsatisfactory treatment, display for years no traces of the disease. On the other hand, there are persons thoroughly and systematically treated from the outset who display from time to time well-marked indications of the disease. Certainly there are grounds for the opinion that persons who have suffered very slightly from secondary symptoms are more prone to have the severer visceral lesions of the later stage.

When we consider that syphilis is one of the most amenable of all diseases to treatment, it is lamentable that the later stages which come under the charge of the physician are so common. This results, in great part, from carelessness of the patient, who, wearied with treatment, cannot understand why he should continue to take medicine after all the symptoms have disappeared; but, in part, the profession also is to blame for not insisting more urgently in every instance that acquired syphilis is not cured in a few months, but takes at least two years, during which time the patient should be under careful supervision. The treatment of the disease is now practically narrowed to the use of two remedies, justly termed specifics—namely, mercury and iodide of potassium. The former is of special service in the secondary, the latter in the tertiary manifestations of the disease; but they are often combined with advantage.

Mercury may be given by the mouth in the form of gray powder, the hydrargyrum cum creta, which Hutchinson recommends to be given in pills, one-grain dose with a grain of Dover's powder. One pill from four to six times a day will usually suffice. I warmly endorse the excellent results which are obtained by this method, under which the patient often gains rapidly in weight, and the general health improves remarkably. It may be continued for months without any ill effects. Other forms given by the mouth are the pilules of the biniodide (gr.  $\frac{1}{16}$ ), or of the protiodide (gr.  $\frac{1}{8}$ ), three times a day.

Inunction is a still more effective means. A drachm of the ordinary mercurial ointment is thoroughly rubbed into the skin every evening for six days; on the seventh a warm bath is taken, and on the eighth the mer-

curial course is resumed. At least half an hour should be given to each inunction. It is well to apply it at different places on successive days. The sides of the chest and abdomen and the inner surfaces of the arms and thighs are the best positions.

The mercury may be given by direct injection into the muscles. If proper precautions are taken in sterilizing the syringe, and if the injections are made into the muscles, not into the subcutaneous tissue, abscesses rarely result. One third of a grain of the bichloride in twenty drops of water may be injected once a week, or from one to two grains of calomel in glycerin (20 minims).

Still another method, greatly in vogue in certain parts of the Continent and in institutions, is fumigation. It may be carried out effectively by means of Lee's lamp. The patient sits on a chair wrapped in blankets, with the head exposed. The calomel is volatilized and deposited with the vapor on the patient's skin. The process lasts about twenty minutes, and the patient goes to bed wrapped in blankets without washing or drying the skin. A patient under mercurial treatment should avoid stimulants and live a regular life, not necessarily abstaining from business. Green vegetables and fruit should not be taken. Salivation is to be avoided. The teeth should be cleansed twice a day, and if the gums become tender, the breath fetid, or the tongue swollen and indented, the drug should be suspended for a week or ten days.

In congenital syphilis the treatment of cases born with bullæ and other signs of the disease is not satisfactory, and the infants usually die within a few days or weeks. The child should be nursed by the mother alone, or, if this is not feasible, should be hand-fed, but under no circumstances should a wet-nurse be employed. The child is most rapidly and thoroughly brought under the influence of the drug by inunction. The mercurial ointment may be smeared on the flannel roller. This is not a very cleanly method, and sometimes rouses the suspicion of the mother. It is preferable to give the drug by the mouth, in the form of gray powder, half a grain three times a day. In the late manifestations associated with bone lesions, the combination of mercury and iodide of potassium is most suitable and is well given in the form of Gilbert's syrup, which consists of the biniodide of mercury (gr. j), of potassium iodide ( $\frac{3}{4}$  ss.), and water ( $\frac{3}{4}$  ij). Of this a dose for a child under three is from five to ten drops three times a day, gradually increased. Under these measures, the cases of congenital syphilis usually improve with great rapidity. The medication should be continued at intervals for many months, and it is well to watch these patients carefully during the period of second dentition and at puberty, and if necessary to place them on specific treatment.

In the treatment of the visceral lesions of syphilis, which come more distinctly within the province of the physician, iodide of potassium is of equal or even greater value than mercury. Under its use ulcers rapidly heal, gummatous tumors melt away, and we have an illustration of a spe-

cific action only equalled, by that of mercury in the secondary stages, by iron in certain forms of anæmia, and by quinine in malaria. It is as a rule well borne in an initial dose of ten grains, or ten minims of the saturated solution; given in milk the patient does not notice the taste. It should be gradually increased to thirty or more grains three times a day. In syphilis of the nervous system it may be used in still larger doses. Seguin, who has specially insisted upon the advantage of this plan, urges that the drug should be pushed, as good effects are not obtained with the moderate doses.

When syphilitic hepatitis is suspected the combination of mercury and iodide of potassium is most satisfactory. If there is ascites, Addison's or Niemeyer's pill (as it is often called) of calomel, digitalis, and squills will be found very useful. A patient of mine with recurring ascites, on whom paracentesis was repeatedly performed and who had an enlarged and irregular liver, took this pill for more than a year with occasional intermissions, and ultimately there was a complete disappearance of the dropsy and an extraordinary reduction in the volume of the liver. Occasionally the iodide of sodium is more satisfactory than the iodide of potassium. It is less depressing and agrees better with the stomach. Many patients possess a remarkable idiosyncrasy to the iodide, but as a rule it is well borne. Severe coryza with salivation, and œdema about the eyelids, are its most common disagreeable effects. Skin eruptions also are frequent. I have known patients unable to take more than from twenty to thirty grains without suffering from an erythematous rash; much more common is the acne eruption. Occasionally an urticarial rash may develop with spots of purpura. Some of these iodide eruptions may closely resemble syphilis. Hutchinson has reported instances in which they have proved fatal.

Upon the question of syphilis and marriage the family physician is often called to decide. He should insist upon the necessity of two full years elapsing between the date of infection and the contracting of marriage. This, it should be borne in mind, is the earliest possible limit, and there should be at least a year of complete immunity from all manifestations of the disease.

In relation to life insurance, an individual with syphilis can not be regarded as a first-class risk unless he can furnish evidence of prolonged and thorough treatment and of immunity for two or three years from all manifestations. Even then, when we consider the extraordinary frequency of the cerebral and other complications in persons who have had this disease and who may even have undergone thorough treatment, the risk to the company is certainly increased.