

THE MANAGEMENT OF SYPHILIS IN ELDERLY PERSONS

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Syphilis is one of the most serious of infectious diseases and each year late visceral lesions of the disease are responsible for the deaths of many individuals. Syphilis also has a high morbidity rate; consequently, the economic losses which are directly or indirectly traceable to this infection are appalling. This disease may simulate almost any condition and because of its protean manifestations, it is necessary that the physician should be familiar not only with its usual manifestations but that he should consider the possible presence of syphilis in the differential diagnosis of all chronic ailments. It has been estimated that approximately ten per cent of the adult population is infected with syphilis; therefore, every physician, whether he is a general practitioner or whether his practice is limited, is certain to be consulted by persons who present diagnostic and therapeutic problems caused by this disease.

Most syphilitics become infected in the second or third decade of life; therefore, the majority of elderly individuals who are now consulting the physician with symptoms and findings related to this infection contracted the disease before the arsphenamines and bismuth were used in treatment as extensively as they are now. Consequently, these individuals received little or no treatment in the early stages of their disease. Furthermore, the subsequent treatment which they received frequently was inadequate as compared with the present day standards of antisyphilitic therapy. Unless some means can be found to keep the young individual with acute syphilis under supervision long enough for the administration of adequate treatment, the practitioner will continue to see elderly patients for whom a decision of paramount importance must be made regarding the amount and type of antisyphilitic therapy which is indicated. The physician should not fail to explain to the young person with acute syphilis the necessity and importance of continuous and intensive treatment at this stage of the disease. The health and happiness of the patient and that of the future marital partner and their children as well as the removal of the patient's menace to the public health depends upon an intensive and judicious therapeutic attack in the early stages of the disease. The results obtained by modern antisyphilitic remedies leave much to be desired, but an early diagnosis followed by intensive and continuous treatment, as advocated by the Coöperative Clinic Group, will materially decrease the incapacitating and fatal affections of syphilis which occur in the fourth, fifth, and sixth decades of life.

After the acute manifestations of syphilis disappear, the disease becomes latent or asymptomatic. This relatively rapid disappearance of

the visible signs and subjective symptoms is somewhat unfortunate since this lack of evidence of the disease is responsible for the discontinuance of treatment by many infected individuals at this most inopportune time because they think it is unnecessary to submit to the inconvenience and expense which adequate antisyphilitic therapy entails. When a young person with acute syphilis fails to cooperate with his physician before an adequate course of treatment has been completed, he becomes a menace to others because of possible infectious mucocutaneous relapses, and the possibility that he will eventually obtain a serological or clinical cure is greatly decreased. In many such individuals, involvement of the cardiovascular and central nervous systems, or other types of late syphilis develop later, while other patients may reach the sixth or seventh decade of life with few if any clinical signs of the disease. It is with the latter group of patients that the physician must frequently decide what type of antisyphilitic therapy, if any, should be given.

A young person with a chancre or secondary syphilis seldom presents contraindications to intensive therapy; consequently, the treatment of acute syphilis can be fairly well systematized. The present day method of continuous treatment consisting of alternating courses of arsphenamine, bismuth, and mercury is well tolerated by young, vigorous individuals and insures better results than does the intermittent type of therapy which has been used in the past.

Patients with late syphilis and especially those who have had a syphilitic infection for several years should not be subjected to a systematized type of treatment such as is used in acute syphilis. This fact was not so well established during the earlier period of the use of arsphenamine therapy; consequently, intensive and more or less systematized treatment which was administered to individuals with late syphilis frequently produced disastrous results. It is now known that many of these untoward results of arsphenamine therapy were due to the injudicious use of the drug rather than to its impurities or its toxic effect. Experience has clearly demonstrated that the treatment of late syphilis must be individualized rather than systematized. With this view in mind, what type of treatment should be administered to a syphilitic patient who is past sixty years of age? Obviously, the duration of the disease, the physical condition of the patient, and the amount and type of past treatment which the patient has received are more important factors than the age. The serious late manifestations of this disease which often involve the cardiovascular and central nervous systems manifest themselves most frequently between the ages of thirty-five and fifty and require a more complicated and individualized type of treatment than is necessary for some other types of late syphilis.

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ACUTE SYPHILIS IN ELDERLY PERSONS

Although syphilis, when seen in elderly persons, usually is in a late stage, an acute infection occasionally occurs. The acute manifestations do not differ from those seen in younger individuals. Because of the age of the patient, extragenital lesions, particularly those occurring on the lip, may be confused with malignancy; likewise any resistant, inflammatory lesion which develops around the nail fold and is associated with adenitis which occurs early should be suspected of being a chancre. This should be considered especially in the case of physicians who might become infected while doing obstetrical work. Such errors in diagnosis can easily occur when the physician fails to note carefully the characteristics of the lesion. A chancre is an infiltrated, inflammatory lesion which has been present for a comparatively short time. If it is seen early and before topical applications have been used, it will usually have a superficial, clear cut erosion at the center from which a serous exudate can readily be obtained. It does not bleed as easily as a carcinoma, and it is accompanied by a more rapid enlargement of the regional lymph nodes. Other manifestations of acute syphilis such as general malaise, headache, generalized body pains, and lesions of the skin and mucous membranes, if present, aid in clarifying the differential diagnosis. In all questionable lesions, a dark-field examination should be made. If the lesion has been present as long as three weeks, a Wassermann test is of value but the serological findings must, as at all times, be interpreted with due consideration of the clinical findings.

The treatment of acute syphilis in elderly patients is similar to that in youth. It should be as intensive as the physical condition of the patient will permit. Age alone is not a contraindication to adequate treatment in such cases; however, mercury should not be given and courses of the arsenicals should be modified if the patient has impaired kidney function. Hypertension does not necessarily contraindicate the use of the active spirocheticidal arsenicals in the treatment of acute syphilis.

The physician hopes to obtain a twofold objective by his treatment: (1) to eradicate the infection to the extent of accomplishing what is at present considered to be a clinical and serological cure, and (2) to prevent further spread of the disease by quickly and permanently removing all infectious lesions. It is very important that these objectives be attained in young individuals for they have a long life expectancy during which the occurrence of late visceral involvement would be disastrous. Likewise, they are at the age of sexual activity, and if adequate treatment has not been administered, they may infect others. The necessity of obtaining a cure in an elderly person with acute syphilis is not so

important as it is unlikely that they will live long enough for the serious late manifestations of the disease to develop; however, treatment should be sufficiently intensive to insure against the development of infectious relapses.

The treatment of acute syphilis in elderly persons should be continuous for at least a year and should consist of alternating courses of neoarsphenamine and bismuth such as is used in acute syphilis in younger individuals. Mercury should not be used because of its damage to the kidneys. It is possible that mapharsen will be the arsenical of choice for elderly patients because of the relatively few complications and reactions which have been observed following its administration. However, further observation is necessary before the comparative value of this new arsenical can be established.

LATE SYPHILIS IN ELDERLY PERSONS

A few syphilitics who have received little or no treatment during the early stages of their disease will reach the age of sixty or more with very little if any clinical evidence of their disease, while others will present signs which are compatible with the diagnosis of late syphilis. In some cases the signs are the results of scarring and are not always proof of the presence of marked activity of the disease. For example, an elderly syphilitic may have fixed pupils, absent reflexes, or a scarred smooth tongue with areas of leukoplakia on its surface, all of which may be sequelae of the inflammatory reaction of late syphilis and at times it may be very difficult to evaluate these findings properly. However, a careful history of the patient's complaints and of the type and amount of past treatment is of great value and should be considered carefully and correlated with the physical and laboratory findings before the final disposition of each case is made. Other patients may present definite manifestations of late syphilis such as nodular ulcerative syphilitids, or a gumma of the nasopharynx.

A positive Wassermann reaction does not necessarily mean that a lesion is due to syphilis nor does a negative reaction rule out syphilis as a diagnosis. In spite of this, the test should be included in a thorough examination of every patient and the serologic findings must be correlated with the clinical findings. It is important to keep in mind that the reaction is apt to be negative in the presence of late syphilis.

The first prerequisite in the management of syphilis of many years' duration is a careful physical examination. Special care should be exercised in evaluating the condition of the myocardium and the coronary circulation, and, if possible, the physician should decide what part if any the syphilitic infection plays in the production of the patients' symptoms. If a patient is past sixty years of age and if the only evi-

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dence of syphilis is a positive Wassermann reaction, there is little likelihood that serious late manifestations of the disease will develop; in all probability, he will live out his life expectancy and die from some other cause. This type of patient cannot be cured of his syphilis, and he will not transfer his infection to others; therefore, antisyphilitic treatment should be withheld as much harm may result from too intensive treatment. A mild treatment consisting of potassium iodide and mercury by mouth in the form of mixed treatment tablets or in compound syrup of sarsaparilla seems to benefit some elderly syphilitics. The formula for this is:

Bichloride of mercury	gr. I. or gr. II.
Potassium Iodide	drams IV
Com. Syrup Sarsaparilla	oz. IV

A teaspoonful of the mixture should be taken after each meal at varying periods of two months at a time. The use of arsenicals is definitely contraindicated in this type of case.

In cases in which late manifestations of the disease are present or in which there is reason to believe that the syphilitic infection is responsible for the patient's symptoms, conservative antisyphilitic therapy should be administered. Individualization of treatment is very essential in this type of patient. It is important that an accurate evaluation of the condition of the vital viscera be made before treatment is started. The type and amount of treatment should be planned so as to avoid the two most common disasters which may result from too intensive treatment of late syphilis. These are (1) therapeutic shock or the Herxheimer reaction, and (2) therapeutic paradox. The Herxheimer reaction refers to the inflammatory reaction which sometimes occurs at the site of a syphilitic process a few hours following the administration of active spirocheticidal remedies, particularly the arsenicals. Such a reaction may be disastrous when it occurs at vulnerable spots such as the orifices of the coronary arteries. Because of this, the rapidly acting spirocheticidal drugs should never be used as the initial treatment of late syphilis and this is particularly true in elderly individuals. The therapeutic paradox refers to the disastrous results which occur when the healing of a syphilitic focus occurs too rapidly to permit physiologic compensation of the involved organ. This unfortunate result of treatment occurs mainly in cases of late hepatic and cardiovascular syphilis. Like the Herxheimer reaction, the therapeutic paradox occurs most frequently following the administration of the arsenicals.

These disastrous results of antisyphilitic therapy can be avoided by the use of slowly acting remedies such as bismuth and mercury. Bismuth is the drug of choice for the elderly syphilitic with late manifestations which require treatment. Some authors have observed a mild

Herxheimer reaction following the administration of bismuth but such an experience is very uncommon and, if the first four doses are less than is usually administered, there is little to fear from its use. Another advantage in the use of bismuth is that it does not impair kidney function as much as mercury. An insoluble salt such as bismuth salicylate will be absorbed slower than the soluble preparations and is to be preferred when slow healing is desired. Potassium iodide in gradually increasing dosage to the point of tolerance is an important part of the treatment of late syphilis and is especially valuable in elderly patients.

Weekly injections of bismuth and the oral administration of potassium iodide will be sufficient treatment for the average elderly patient with late syphilis. Potassium iodide in as large amounts as are well tolerated should be given during the course of bismuth. A course of fifteen or twenty injections is usually well tolerated. Courses of treatment alternating with a rest period of two months should be given until the maximum benefit which may be expected has been obtained. The patient should be examined periodically, and the subsequent treatment should depend upon the progress of the disease. A course of twelve injections of bismuth each year and the administration of potassium iodide at regular intervals each year are well tolerated and will help keep the disease arrested.

Arsenical therapy should be given only in cases in which the syphilitic lesion has not disappeared or the progress of the disease has not been arrested by potassium iodide and bismuth. Treatment should never be started with an arsenical. Arsphenamine should not be used in elderly people. Neoarsphenamine is the arsenical of choice; the initial doses should be small and the maximum dose should not exceed 0.45 gm. Bismarsen may be used instead of neoarsphenamine; however, the initial doses should be small and the patient should be given the preparatory treatment with bismuth and iodides before the administration of this drug.

SUMMARY

The treatment of acute syphilis in elderly people is similar to that used in acute syphilis in young individuals. In elderly patients, it is not so important that the object of treatment should be to produce a clinical and serological cure because the life expectancy is not great enough to allow for the development of the late, serious manifestations of the disease. However, the treatment should be continuous for at least one year, during which time arsenicals and bismuth are alternated. If well tolerated, the treatment should be continued for another six months. It is important, however, that the treatment be sufficiently intensive to insure against recurrences of infectious lesions in order to prevent further spread of infection.

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Treatment of late syphilis in elderly persons must be individualized. Before treatment is started, the patient should be examined carefully to determine whether there is any involvement of the vital viscera which might be activated by antisyphilitic therapy. The treatment should be intensive enough to arrest the progress of the disease only, and no attempt should be made to eradicate the infection. It is only by conservative treatment, which is adapted to each individual case, that the patient has a chance of living out his life expectancy. If this is not kept in mind and if treatment is intensified, much harm may be done. This is especially true if the arsenicals are used before the patient has received thorough preparatory treatment with iodides and bismuth.

Elderly patients who are in comparatively good health yet have positive serologic findings and few or doubtful clinical signs of an old syphilitic infection should be treated only if signs which may be considered to be due to the infection develop. It is this type of patient in whom mixed treatment by mouth is sometimes beneficial.