

A Review of the Work at Soonchun Leprosy Settlement and Notes on the Leprosy Situation in Korea.

R. M. WILSON.

A REVIEW of our leprosy work for the past year may be of some interest to other institutions.

As to diagnosis, it is unfortunate that we do not have more positive diagnostic methods in the early stages of the disease. There are those border-line cases which prove a real problem. I have had three cases recently showing puffiness of the face, loss of eyebrows, etc., and while giving quite the picture of leprosy I could not give a positive decision for lack of any anæsthesia. I put all three cases on syphilitic treatment, asking them to return in a few months for further study. It would be a greater mistake to take such doubtful cases into the colony, than to delay diagnosis for a few months. On January 17th, a case was referred to me by Dr. L. K. Boggs, with the general appearance of leprosy; loss of eyebrows and some puffiness of face were the chief signs. Examination showed no anæsthesia, no pigmentation and bacillus negative. However, he had a four plus

Wasserman with some nose and throat trouble, and stated that after a few injections of 606, his eyebrows began to return in only a few months, much quicker than the return would be in cases of leprosy. So he was put on further syphilitic treatment.

Recently a young woman came, stating that her people had driven her out because her face resembled that of a "leper," due to loss of eyebrows. She stated that in the past she had applied medicine to her eyebrows to beautify them, and for this or other reasons they had fallen out. She was told to wait and watch for other signs. Two other cases came, thinking they were leprosy, stating there was tingling of the skin, feeling like the crawling of ants, which is often an early sign. No positive symptoms could be located, and they were diagnosed as neuræsthenia.

If there is a positive anæsthetic spot I usually diagnose leprosy, unless this can be accounted for by some surgical trauma or injury in the nerve trunk.

Often cases who are leprosy will try and deceive us, and cover up their symptoms, stating there is no anæsthesia when there is. Such will have to be blindfolded and tested. Some will claim to be leprosy to get the benefits of the colony. This speaks more for the contentment of the inmates of the colony than for the individual's common sense.

Another aid in diagnosis, and often an early one, is the thickening of the nerve trunks, usually the ulnar. In the examination of 1,000 cases Chatterji found the ulnar nerve hard in 56 per cent., peroneal 53 per cent., and great auricular 18 per cent. A girl came to our General Hospital asking that a tumour be removed from her shoulder. I dissected out two masses about the size of a lead pencil running across her scapula and measuring $4\frac{1}{2}$ inches in length, and later these showed bacilli. She confessed later to anæsthesia.

Treatment.—We have found nothing that has given so much benefit and satisfaction as the hydnocarpus oil, injected twice weekly, from 4 to 8 c.c. We get our supply direct from Siam, in 300 lb. tanks, about 33 cents per pound delivered. This should be made fresh from the summer fruit and not kept long enough to become rancid. It costs us about one yen per pound, but in the local market it is about three yen per pound. Our stronger workmen ask for large doses, and in one clinic where there are 150 cases, they asked that the dose should be increased from 5 to 7 c.c., stating that it made them feel better and more vigorous.

The esters have given so much pain that our cases refuse to take them. The stock of esters left over is proving very good in the local treatment of scabies and certain itching excemas, which I should like to ask others to try. We are now adding 2 per cent. esters to all scabies and excema ointments. I obtained a supply of the iodised esters from Manila and tried them, injecting directly into the nodules, which is so highly recommended. While it dried up many of the nodules it proved so painful a process that our cases could not continue with them.

In most of our cases we expect a very distinct improvement with three months' treatment. In another three months there is still more marked improvement and clearing up of the skin. Of course, in treatment there are many side lines such as diet, exercise, baths, sanitation, and complications that must be taken into consideration. Syphilitic complications are a big problem, and some of these will not respond to treatment. In many of the neural cases no special change or improvement can be expected, for these cases are often practically normal except for some small anæsthetic areas, and these may continue so for many years, neither better nor worse.

Pellagra.—Many of our cases show a pellagroid condition breaking out, and this is often the case in the spring. I wonder if other institutions experience this! It is quite like pellagra with a sunburn rash on the wrists, neck and exposed parts with stomatitis and intestinal disturbances. Our cases usually clear up quickly upon being given plenty of pork in their diet.

Another useful adjunct we find are the swimming clubs. These seem to prove beneficial and it is fine exercise, and it is not difficult to get the patients to enter into this sport with zeal. We are on the seaside, and the hot sand rubs and then a good swim are popular. In neuritis we find atophan, cinamomin and terrotodoxin give the best relief in the order named. Calcium chloride intravenously is also beneficial. Some cases seem to be helped by nothing, and have to suffer intensely.

One discharged case came to us this week saying he had been entirely well for 14 years, and that he has a good farm and is very happy. During the past year 82 cases have returned to their homes. Many more are quite able to return were it not for the fact that they are so feared and dreaded in their villages that it is almost impossible to get them re-established in society. One big problem is what to do with the "cured" case.

We are doing vasectomy upon a number of cases and allowing them to marry and live within the colony, both parties being arrested cases. These support themselves on the land except for an allowance of one yen a month per person. This couple also adopts a child, and thus the home idea is made more perfect.

The youngest case I have seen was nine months old, but it is quite unusual to see them under the age of four years. It is generally accepted that leprosy is a disease of childhood and youth, even though it may not appear until later in life, the inoculation probably taking place in early years. It is probably the most mildly infective disease known, and inoculation is by *long* and *close* contact. At the Manila Leprosy Conference the disease was divided into two classes, "open" cases, which may spread the disease, and "closed" cases in which the bacillus is not found in scrapings from the skin, and therefore non-infective. Rogers claims that 60 per cent. are house infections. Humidity has much to do with the incidence of leprosy. It is a very striking fact that most of the 20,000 cases of leprosy in Korea are in the southern half of the country, and only a very few north of Seoul.

It was very encouraging to attend the Tokio Leprosy Conference and see the earnest zeal and interest taken in this subject. Eighty papers were presented, and over one hundred were in attendance. These energetic students are working upon almost every line imaginable. At this conference, just as throughout the world, there are two classes of men—those believing that "once a leper, always a leper" and others with a bright and hopeful outlook, believing in a probable cure. Some men feel that one treatment is about as poor as another and that isolation, good food and sanitation are the essential things. Others feel that chaulmoogra oil has a very definite place in treatment. It was good to see how the Government is backing the work through the Empire, and doing its part. The Japanese are quite like the Germans in their minute detail of study. I look to see the Japanese take a lead in the advancement of this line of work. I should like to make one or two criticisms in a kindly spirit of some of the work I saw, one being that the institutions did not have the thought or idea or hope of a cure, but were places in which the sad creatures could spend the rest of their days in isolation. At one such place I found two big husky Koreans in the early stages of the disease, asleep in their beds at 11 a.m. These men stated that there had been no improvement in their condition,

and apparently none was expected. In most cases treated there should be a very definite improvement seen in three months. It is a most important thing to get one's staff and the entire colony into the *spirit of a cure*. Every case should make this his first aim. If the doctor does not expect a cure, what can be expected of the patient! Doctors spend too much time debating the word "cure." What if a few leprosy germs are discovered at post-mortem. If 70 per cent. to 80 per cent. of the cases discovered early show marked improvement, this is the thing we want. Call it "arrested" or anything else, but let us have a little more faith in improvement. My patients are just as keen and interested in their improvement as I am. We keep posted a list of the essentials in treatment. Even our blind cases have their tasks, and are not allowed to remain in bed, but stir about. Some own and care for rabbits, which interests them and shortens the days.

Another criticism I wish to make is that while the doctors and visitors must wear rubber boots, masks and gowns, and are sprayed from top to bottom, yet, on the other hand, there are attractive little non-leprosy nurses taking pulses, making beds, and caring for the patients. Some were carelessly leaning upon the patients' beds. I noticed also that some of the homes and cottages used by the doctors and attendants were not screened against flies and mosquitoes, and were only a couple of hundred feet away. In our institution, the homes of the attendants are half a mile away from the colony, and are screened.

In our institution also, no healthy person comes in contact with cases, except the two doctors, and all are taught not to touch a door knob or anything used by inmates. All injections, dressings and nursing is done by the leprosy staff, and here is a splendid opportunity to provide work for the "closed" cases. I think it was reported that none of the workers in Japan had been infected, yet there is a slight danger that could be avoided. I believe that every institution should have a nurses' training school, and a few good nurses given the task of training the inmates to do this work. In one institution there were healthy cooks, and I noticed that these received and handled the dishes which came back from the wards. It is a good policy to keep the number of healthy workers in leprosy institutions down to the minimum. 95 per cent. of the jobs about such places can be filled by closed cases, and laundry, cooking and nursing can all be done by healed patients.