Leprosy Treatment in Weihaiwei, North China.

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The *Lancet* for January 14th, 1928, contained an article by Sir Leonard Rogers on the curative action of the hydnocarpates and iodides in Leprosy and stated that this new treatment held out great hopes for the leper.

The new drug—alepol or sodium hydnocarpate—was unobtainable in China at that time, and I accordingly ordered a supply from England and commenced treatment therewith of some of our lepers on June 4th.

A census taken in March, 1928, of the leper population of this Territory—288 square miles—showed seventy cases, and a previous census taken in 1916 showed the same number. They are scattered over the territory in various villages, many of which are only accessible by bridle—or footpaths, and the lepers have always been allowed, as in other parts of China, to wander freely about the streets, attend the markets and village shops, work in the fields and even marry and bring up families.

It is generally stated that the first two decades of life are those in which the infection is most frequently acquired, but the following table, based on the patients' statements of the duration of their illness, suggests that the third and fourth decades are equally susceptable ones in our cases ; the figures are too small, however, to afford any reliable data.

	TABLE I.				
1 00	insidence	~	the	4:	

	Age	incidence	e ot	the dise	ease.		
Under 10 years	s		•••				9
10-15 years							13
15-20 years							11
20-25 years							11
25-30 years							12
30-35 years							8
35-40 years							2
40-50 years	•••						2
Over 50 years	•••		•••			••••	2

The duration of the illness has been as follows :--

TABLE II.							
		Duration	of	Illness.			
Under 5 years				•••		•••	15
5-10 years 10-15 years	•••		•••	•••			29 16
15-20 years							7
20-30 years							1
Over 30 years							2

There is, I find, no material difference in the average duration of the disease among those who developed it during the first two decades of life, and those who developed it later. One patient aged 61, is said to have been a leper for thirty-four years, and several others have survived for twenty to twenty-five years.

Treatment of Cases. Three cases were taken in hand at first as being nearest to Port Edward, the treatment being given in the patients' own homes; they comprised a man of thirty-three and another of thirty, both of whom had had leprosy for four years, and a man of forty who had been a leper for fourteen years. These three patients were given alepol hypodermically twice a week regularly; the first named had an extensive open sore in the left chest, which healed under the treatment, and he informed me in September that he was then able to walk into Port Edward (about two miles) whereas he had not been able to do so for some time before commencing the treatment. All three of these expressed themselves as feeling very much better.

In October it was found possible to extend my visits to Chi Chia Chuang, Chang Feng and Feng Lin (*i.e.*, from eight to nine miles from Port Edward). At the first named village a man of thirty-two, who had been a leper for ten years, and who had given up his occupation as a carriage-driver on account of increasing paralysis of the arms, came for treatment, and early in January he was able to resume his occupation. At Chang Feng a male of eighteen who had had the disease for nine years, has been treated regularly up to date, while at Feng Lin a man of thirty-six who had been a leper for eleven years, another of the same age who had had the disease for thirteen years, and a lad of thirteen who had been a leper for one year, came for treatment. The first named of these three ceased treatment temporarily after January 10th, as he was very ill with bronchitis.

In November a man of twenty-four, who had had the disease for three years came across the hills from Li Yao for treatment, but found the journey too much for him after four injections, and has not been seen by me since November 20th. In the same month a man of thirty who had been a leper for six years applied for treatment at Chang Feng but after two injections he disappeared ; it them transpired that he was a peripatetic beggar from outside our territory and had resumed his wanderings.

In November also it was found possible by the use of a motor-bicycle and side-car to extend my visits to Liu Lin Tszu (some twelve miles from Port Edward), and the following cases came there for treatment :—

А	male	of 36	who had	been a	leper	for 4	years.
	,,	26	,,	,,	,,	9	,,
	,,	38	,,	,,	,,	6	,,
	,,	9	,,	,,	,,	1	,,
	**	37	"	,,	**	3	,,
	**	27 94	,,	,,	,,	2	.,
	**	24	,,	,,	,,	9	,,

The last but one gave up treatment after January 10th, but will, I believe, re-apply later; the last named on the list gave up treatment after January 24th as the reaction (redness of the tubercles) worried him. Some of his neighbours had commented on the fact, and presumably he is hyper-sensitive. He also, I think, will resume treatment later, but would probably be a more suitable case for admission to Hospital.

Some of these patients seem to think that a few injections ought to suffice to effect a cure, and I had a little difficulty in persuading them that the treatment must be continued for a year at least.

Our winter is somewhat severe, the minimum temperature being usually 10° to 12° F. with occasional keen northerly winds, and lepers suffer intensely from the cold, so much so that I have found considerable difficulty in persuading them to leave their over-heated and unventilated homes even for the short time necessary for an injection. Some of them live from one to two miles or more from the central point at which the treatment is administered—usually outside a village police-station and even on calm and sunny days with no snow lying, they showed **a** marked aversion to facing the open air. They naturally also suffer from intercurrent diseases and complications, many having bad eyes, while bronchial and laryngeal troubles are not rare.

Muir of Calcutta states that this treatment with alepol should be followed by the administration of repeated maximum doses of iodide of potassium, extending over a period of not less than five months. This drug produces a reaction in leprous tissues and acts therefore as an indicator of the extent of the cure ; it has to be used with caution, beginning with small doses and carefully watching the results, the doses being graded accordingly, as a severe reaction is accompanied by high fever. It can only be carried out with safety therefore in an institution to which lepers are admitted for the purpose—a treatment centre, with beds. The absence of reaction over this extended period verifies the fact that the patient is cured.

I am satisfied that the patients have benefited by the treatment, but it is too early yet to talk of cures, and the treatment will be continued by Doctor McGlorick, to whom I transferred the cases when I left for England.