

## LEPROSY NEWS AND NOTES

*Information concerning institutions, organizations and individuals connected with leprosy work, scientific or other meetings, legislative enactments, and other matters of interest.*

### REPORTS OF MEETINGS

#### FIFTH REUNION, LEPROSY PROPHYLAXIS SERVICE OF SÃO PAULO, BRAZIL

During the fifth annual reunion of the physicians of the Leprosy Prophylaxis Service of São Paulo, held November 25-27, 1939, there were presented 42 papers on various aspects of leprosy, special attention being given to a new classification of the disease which it is proposed be put to use beginning in 1940. These papers, which as in past years will be published in a special number of the *Revista Brasileira de Leprologia*, is listed in that periodical [7 (1939) 437-439] as follows:

#### FIRST SESSION, NOVEMBER 25, 9 P.M.

1. DR. LUIZ MARINO BECHELLI: Quinoline in the treatment of leprosy (preliminary note).
2. DR. FERNANDO ALAYON: Histopathology of the lepromin test in lepromatous cases.
3. DR. RENATO PACHECO BRAGA: Lepra verrucosa.
4. DRS. OSVALDO FREITAS JULIÃO and ANTONIO COUCEIRO: On the differential diagnosis of lepra nervosa.
5. DR. LINNEU MATTOS SILVEIRA: Surgical correction of supra-ciliary alopecia in leprosy.
6. DR. ARGEMIRO RODRIGUES DE SOUSA: Association of Bowen's dyskeratosis and leprosy.
7. PROF. WALTER BÜNGELER, DR. OCTAVIO GONZAGA and DR. NELSON DE SOUSA CAMPOS: Congenital leprosy.
8. DR. JOSE MENDONÇA DE BARROS: (a) The methods of illumination in the biomicroscopy of the leprous eye. (b) Biomicroscopy of the leprous cornea. (c) Bacteriology of the ocular lesions of leprosy.

9. DRs. LAURO DE SOUSA LIMA and FLAVIO MAURANO: (a) Plan of study of lepra reaction. (b) Peculiarities of erythema nodosum of leprosy.

SECOND SESSION, NOVEMBER 26, A.M.

1. DRs. LUIZ MARINO BECHELLI and ARMANDO BERTI: Leprotic lesions of the buccal mucosa; clinical study.

2. DR. DIRCEU G. DE ARAUJO: General surgery in leprosy cases.

3. DRs. LUIZ MARINO BECHELLI and DANILO NOGUEIRA DA CUNHA: Vitamin B in the treatment of leprosy neuritis.

4. DR. MOACIR SOUZA LIMA: Lepromin; experimental study.

5. DR. ARGEMIRO R. DE SOUSA: The Weill-Mitchell syndrome of leprosy origin.

6. JORGE TOLEDO SALES: The odontological service in the children's department of the Sanatorio Padre Bento.

7. DRs. HUGO ANTONIO GUIDA, FLAVIO MAURANO and LAURO DE SOUSA LIMA: Clinical aspects of lepra reaction; "Tifose leprotica."

THIRD SESSION, NOVEMBER 26, 8 P.M.

1. DR. LAURO DE SOUSA LIMA: Atypical forms of leprosy.

2. DISCUSSION: The classification of leprosy.

FOURTH SESSION, NOVEMBER 27, 3 P.M.

1. DR. FLAVIO MAURANO: (a) Demonstration of the lesions of diffuse leprosy by methylene blue. (b) Erythema nodosum in diffuse leprosy. (c) The disturbance of sensibility in diffuse leprosy.

2. DR. JOSE MENDONÇA DE BARROS: Incidence of ocular complications in the patients at the Sanatorio Padre Bento; the value of the examination of the eyes in prognosis.

3. DR. LUIZ MARINO BECHELLI: The treatment of lepra reaction by vitamin C.

4. DR. ARI PINTO LIPPELT: On intradermal infiltrations.

5. DR. JOSE MENDONÇA DE BARROS: (a) The present status of the treatment of ocular leprosy. (b) On the ocular reaction.

FIFTH SESSION, NOVEMBER 27, 8 P.M.

1. DR. CID BURGOS: Epidemiological investigation.

2. DR. OSVALDO FREITAS JULIÃO: On a case of pure lepra nervosa.

3. DR. PAULO RATH DE SOUSA: Bone changes in leprosy.
4. DR. JOSE CORREA DE CARVALHO: Rhagades in leprosy.
5. DRS. LAURO DE SOUSA LIMA, NELSON DE SOUSA CAMPOS and FERNANDO ALAYON: (a) The basis of the morphological classification of the tuberculoid leprids. (b) Atypical tuberculoid leprids. (c) Classification of the tuberculoid leprids. (d) Evolution and prognosis of the tuberculoid form of leprosy.
6. DRS. NELSON DE SOUSA CAMPOS and EURICO BRANCO RIBEIRO: Caseous abscess of the nerve in a child with initial tuberculoid leprosy.
7. DRS. LUIZ MARINO BECHELI and AUGUSTO B. DE OLIVEIRA: On the histopathological findings in biopsy specimens from apparently desquamated skin in leprosy cases.
8. PROF. WALTER BÜNGELER and DR. FERNANDO ALAYON: Visceral leprosy. I. Changes in the liver.
9. DR. SERGIO VEIGA CARVALHO: The oto-rino-laryngological section. II.
10. DRS. HUGO ANTONIO GUIDA and LAURO SOUZA LIMA: Auxiliary medications in the treatment of leprosy.
11. DR. JOSE MENDONÇA DE BARROS: (a) General treatment of leprosy, with reference to the ocular complications. (b) Interesting aspects of ocular involvement in leprosy.

#### CAMPAIGN IN URUGUAY

In the Republic of Uruguay, seldom heard from in leprosy news, the president on March 22, 1939, approved a decree creating an Honorary Commission to organize an antileprosy campaign. This Commission, according to an item in the *Boletín Oficina Sanitaria Panamericana*, is composed of five members, whose duties are to organize a general, departmental and sectional census, to determine the necessary elements of the campaign, to supervise the treatment of lepers, to provide for social assistance for the sick and their families, to care for the children of lepers, to direct propaganda, etc. A leprosy law has just been sanctioned by the national parliament. Article 1 declares obligatory, with some exceptions, the reporting of cases by the physicians or administrators of hospitals and sanatoria, directors and teachers of schools, managers of hotels and boarding houses, and captains of vessels. Article 4 prohibits the entrance of foreign cases to the country; if they escape detection they may be repatriated within five years of their admission. For sus-

picious cases periodical medical examination is obligatory for a period of five years. Article 9 makes treatment obligatory. The exercise by lepers of a profession or occupation that would cause them to deal directly with healthy persons is prohibited. Marriage of a leper to a healthy person is tolerated, however, with previous instruction of a physician, but it is obligatory to separate their offspring to prevent contagion. The enforcement of the law is to be under the superintendence of the Ministry of Public Health. The statistics of the last 40 years, it is stated, show a slow advance of leprosy. The first census in 1898 recorded only 47 cases for the whole republic; this number was increased to 180 in 1905; Rodriguez Guerrero in 1929 concluded that there were around 300 cases; but according to Dr. Cesar O. Arguello, a member of the Commission of Hygiene and Assistance of the Chamber of Deputies, a number four or five times as large would be more correct. A dangerous element in the situation has been the immigration of lepers from other countries, attracted by the benignity of the climate in Uruguay.

THE BELGIAN LEPROSY COMMISSION AND THE  
FONDATION PÈRE DAMIEN POUR LA LUTTE CONTRE LA LÈPRE

The introduction to a brochure entitled *Rapport de la Commission de la Lèpre*, published in 1939, states, in effect:

On January 27, 1936, the mortal remains of Father Damien were exhumed from the little cemetery of Molokai. Transferred to Belgium, they were buried on May 4th in the church of the RR. PP. de Picpus, at Louvaine. Certain generous persons, moved by this event, approached our ambassador at London to suggest that Belgium take the initiative to create, in the memory of the Apostle of the Lepers, an international organization for combatting leprosy in the world. This suggestion was submitted to the minister of colonies, M. Edmond Rubbens. On December 6, 1937, he brought it to the attention of a group\* of personages who unanimously associated themselves with the plan which he had developed.

On December 17 there was promulgated a royal decree providing for the appointment of a commission (apparently temporary) charged with the study of means of coordinating, reinforcing and extending the antileprosy work in the Belgian Congo and Ruanda-Urundi. Under its provisions the minister of the colonies, on December 28, appointed the commission thus created. It comprised:

M. J. RODHAIN, director of the Institut de Médecine tropicale Prince Léopold (*president*), M. A.-N. DUREN, director-in-chief of the Service of the Ministry of Colonies (*secretary*), and the Baron J. Troostembergh, Dr. A. DUBOIS, M. J. JENTGEN, Dr. R. MANCHET, Dr. G. TROLLI (director of

FOREAMI), and the president of the Congo Red Cross and the secretary-general of the Ministry of Public Health or their delegates.

The report of this body, adopted on December 1st, 1938, deals with the actual situation in the colony (number of cases about 60,000), the measures actually being employed (number of cases isolated 14,983) and their legislative basis, and means of coordinating, reinforcing and extending the work. Recognizing the present activity in this work, the immensity of the task (the leprosy incidence being more than 5 per thousand) and the complexity of the problem from the medical, social and financial aspects, it is recommended that the work be placed under the general government of the colony. The specific recommendations are as follows:

1. That the action undertaken by the government for the isolation of lepers in agricultural colonies should be extended and that this isolation should be improved by a more scientific selection of cases, by the development of an internal organization of one or more standard types, by the separation of the more contagious cases, by the creation of nurseries for the care of children of lepers, by the establishment of clinics and by hospitalization of the bedridden.

2. That the government should create positions of leprologists, charged particularly with the application of social measures against leprosy, the supervision of the colonies and the study of the epidemiology of the disease.

3. That the scientific study of the disease should be concentrated in a well-equipped central laboratory.

4. That, pending the discovery of more active therapeutic means, the planting of chaulmoogra-producing trees in the colony should be extended.

5. That this action should be reinforced by the creation of a national Belgian organization for the leprosy campaign, the mission of which would consist essentially of the association of funds obtained by voluntary donations in Belgium with the efforts undertaken in the colony in this matter.

In connection with this last suggestion, the commission submitted proposed statutes of an "Association Nationale Belge pour la Lutte contre la lèpre, au Congo Belge et au Ruanda-Urundi, à la Mémoire du Père Damien, Apôtre des Lépreux." This section of the report is cancelled, however, with a note that the project of an association intended to collect funds was subsequently substituted by one of an organization of the nature of a public utility. The original proposal, therefore, has been replaced by the statutes of the Fondation Père Damien pour le Lutte contre la Lèpre, created on October 21st, 1939. These statutes were published in the official *Moniteur Belge*, No. 336, December 2, 1939, together with a royal edict dated November 23, 1939, approving the creation of this establishment and according it civil personality. The secretary of

the council of this organization, the name of which is contracted to "FOPERDA," is M. Felician Cattier, and the secretary is the Baron de Troostembergh; its office—at the time this note was prepared—is at 42 Rue Royale, Brussels.

#### VILLAGES OF FREE SEGREGATION

The following is a condensed translation of part of an article on the Belgian Congo that appeared in the *Bruzelles méd.* in 1939.

The term "villages of free segregation of lepers" was employed in 1931 by Dr. Dupuy, Medical director of FOREAMI. He recommended the creation of such villages in the two subsections of Lower Congo where a preliminary inquiry had revealed the largest number of cases. The propaganda against the disease and the education of the people has been, from the beginning, based on this program.

The principle has been to create villages connected with medical missions, locating the lepers belonging to the chefferies immediately in the neighborhood of the mission. In practice, the application of segregation should be progressive, and pursued with tact but continuity, with the idea ultimately of leading the natives themselves to require the isolation of all lepers. Segregation should be proposed rather than imposed. The doctors should classify their cases into three groups: mutilated, bacilliferous and nonbacilliferous, corresponding to the three successive stages of progressive segregation. The bedridden should be lodged in infirmaries, the active patients to be employed in the agricultural pursuits.

Numerous religious missions, Catholic and Protestant, responded favorably to the appeal of FOREAMI. Some isolated results could be recorded in 1932. In 1933 several small villages had been constructed and 252 lepers were under free isolation, 21 percent of the 1,183 that were under treatment at the end of the year. In 1934, 493 lepers were in the villages, 26 percent of the whole. In 1935, 556 were harbored in fifteen villages, 29 percent of the 1,911 known cases. In the entire colony there were, in 1937, 15,000 lepers isolated out of 60,000, or 25 percent.

In three years FOREAMI had thus obtained most encouraging results. If the lepers actually accept this segregation, it is because it is entirely free, and because the physicians have acted circumspectly. The great influx of the lepers into certain villages attached to missions has raised numerous problems with regard to the provision of lands suitable for the establishment of villages where the

inmates can live for the most part by their own efforts, and also regarding the amount of subsidy that should be allowed each patient. But the most serious problem is that of married lepers and their children. In order not to jeopardize the results obtained, it was preferable not to force matters but to await the beneficial effects of education and persistent persuasion, which will be more effective in this matter than the forcible application of an ordinance.

Segregation such as that adopted by FOREAMI in 1931, and which is called "mitigated segregation," is evidently only the preliminary and preparatory stage of the definitive segregation that is planned by the government. It is the only method of procedure that, until the time of concentration toward the principal colony, will make the separation seem to those affected less brutal and painful.

In Kwango, in 1937, there were only two villages of free segregation, constituting of only the beginning of a larger plan; these places harbored only 36 patients. Aside from them a few were isolated in the neighborhood of certain dispensaries, they bringing the total to 53 patients. There is here a delicate question, which can be resolved only with the cooperation of the missionaries. In Kwango they are not numerous and are overburdened, and it cannot be expected, for a long time to come, to see any important development in the work of assistance to the lepers.

Recent instructions of the Governor General recommend the establishment of large agricultural colonies, in preference to scattered small aggregations. The physicians of FOREAMI remain as yet partisans of the latter solution of the problem.

#### THE BIBANGA AND LUBONDAIE LEPPER CAMPS

The following notes regarding these institutions in the Belgian Congo are taken from material supplied by Dr. E. R. Kellersberger, who developed the former of them and for the past year has been acting as physician-in-charge of the latter in the absence of Dr. George R. Coussar, on furlough in the United States.

*Bibanga.*—This colony, begun in 1931, has been practically completed, though since all of the buildings are of sun-dried brick they can only be called semipermanent. It has become more and more an attractive, orderly village. Trees, flowers and bordergrass, and orderly paths and streets are evident. Each house has a toilet and many of them have kitchens, and the whole has an air of being clean and airy, with plenty of room. With more land at our dis-



posal for fields, and with every inmate doing his part, the question of food has become less acute. The small herd of cattle helps to build up the physical health of the people, providing some of the red meat that they so much need.

A special feature of the institution is the thriving 1,200-tree plantation of *Hydnocarpus anthelmintica*, nine years old and bearing for the last four years. We have made about five gallons of the fresh oil ourselves, and are getting even better results with it than with the oil from Siam. This is the only producing plantation in the Belgian Congo, but we have given about 30,000 seeds to others. Since we have demonstrated that the trees can be grown and the oil can be produced here easily, thus effecting a great economy, the government has become interested in the effort.

We believe that leprosy can be cured. To accomplish that end one of the best things possible is the agricultural colony such as this one, with means and land, and the wholesome influences and human touch that Christian missions can provide. The medical assistants here, two native graduate nurses and three students—the only non-leper employees—are doing excellent work. It is remarkable how, with some supervision, they can run such a large colony, with its many difficult and varied problems. The tribunal, the work kaptas, the tree planters, the road workers—all work together with an *esprit de corp* that is remarkable. The colony has become popular, the natives now knowing that leprosy can be cured or arrested, especially if they come in early. Some 50 patients who were irregular have been expelled and will not be allowed to come back unless they take the matter seriously. A leper must become a real member of our village and in a way leave his people for good; but that is no hardship, for he is expelled by them anyway, or ostracized, or let starve to death.

Until very recently the number of inmates had reached the maximum of 460. This was reduced to about 325 after the recent visit of Dr. Muir, since which time over 100 arrested or clinically cured cases were selected for parole to their homes for six months. Dr. Muir also pointed out the importance of segregating the infectious, lepromatous cases in their own part of the village, and of separating the children. He found that the type of leprosy here, and in another part of the Belgian Congo, was milder than in the Orient, with less open cases and less mutilations. That may perhaps be due to less overcrowding of population and therefore less contact, and to a more balanced diet.

One of the striking facts is the improvement in health and general well being of the lepers after they enter the colony. In general we find that when they enter they are in a semistarved condition, suffering from malaria, hookworm or other intestinal parasites, scabies and avitaminosis,



and have no resistance against concurrent diseases, let alone leprosy. With improved hygiene, food, housing and exercise, with proper treatment of concurrent conditions, and with a sense of being cared for there is in most cases a tremendous improvement. The patient acquires a new outlook on life, new energy, and a new expression. Weight is put on; the sores that are so frequent when they come in heal, and the dry, nonshiny skin becomes more oily and darker in color. In most cases there is actual evidence of diminution of the disease, macules or other skin manifestations becoming less evident and often fading away almost entirely. In cases of the lepromatous type there is often a fading of the congestion of the face and body, with lessening of thickness in the so-called *visage leonine* and the lobes of the ears especially; even the manifestations in the so-called "burnt-out" cases are much improved.

After five years trial of methylene blue we have given it up as not giving any evident permanent benefit. We get the best results with the fresh, whole chaulmoogra oil with 4 percent creosote; two injections are given each week, from 1 to 10 cc. per injection. This treatment is best liked. The next best results have been with iodized (0.5 percent) esters, especially those sent to us by Centro Internacional de Leprologia, Rio de Janeiro, but of that drug we have had only a little.

*Lubondaie*.—This colony, which is rather new and only 3 years in its present location, has an average of 100 cases. It meets ideally the requirements of a satisfactory agricultural colony. Land is free, in large quantities and good quality; peanuts grow well, as do corn, manioc, beans, sweet potatoes, peas, bananas, and plantains. The lepers have goats, sheep, pigeons, guinea-pigs (a great delicacy) and even rabbits. A weekly ration that includes palm oil, salt, and meat once a month, and also a small money ration of about 10 to 15 cents (3 Belgian francs, a considerable amount here), do much to make the people happy.

Most important, and necessary for success, there is a moral and educational guidance that gives new joy and guides the new energies. There is a tribunal chosen by the inmates. He who does not work does not eat. The camp is kept clean and roads (seven miles of them) open; flowers and trees are planted, etc. Anyone who is dissatisfied or refuses to adjust himself to the new conditions is set straight or, if he so desires, sent home. There is no state law for segregating lepers, and we believe that if there were it would not work. We believe in making life so pleasant for our inmates that they do not want to leave, and occasionally we make it hard for them to enter, to make them appreciate the privilege.

#### THE IBAMBI DISTRICT

Conditions in the Ibambi district of the Belgian Congo are reported in *Without the Camp* by Mr. Percy Moules. The district has been allotted

officially to the Red Cross, but as that organization is as yet unable to cope with the large leprosy problem there he was invited to organize a camp at a place called Paku. Described as a collection of tumble-down huts hidden in the bush, with 37 lepers mostly in an advanced stage of the disease, it had been developed in a few months to almost 200 patients under treatment. Within a radius of some thirty miles, it is stated, there are several large leper villages with several hundreds of inmates.

#### THE SUDAN, 1938

Several years ago the attention of the health authorities in the Sudan was turned actively to the leprosy problem and large numbers of patients were isolated in settlements or camps. Reports of that activity have appeared in THE JOURNAL. The following report of the status of affairs in 1938 is taken from a summary, which appeared in the *Journal of Tropical Medicine and Hygiene* [43 (1940) 11-12], of the annual report of the Sudan Medical Service.

The estimated number of lepers in the Sudan is approximately 8,000. Of the 6,701 known cases, 4,594 are in Darfur, 1,841 in Kordofan, 147 in Blue Nile, and only from 6 to 58 in each of the other five provinces. A total of 1,929 are under treatment in camps or settlements and 146 elsewhere, 4,626 others being under observation but not treatment.

The disease is comparatively rare in the northern third of the country and only 11 new cases occurred during the year in the Khartoum Province, with a population of 252,395. The standard of living being higher there than elsewhere, it is possible to arrange for home isolation of most of the cases. That has proved to be the most satisfactory method of dealing with lepers in this area. They live at home in separate houses or rooms, observing the usual precautions to avoid spreading the contagion, and are under the supervision of the public health or dispensary staff, to whom they report for treatment. They keep more fit and are happier under these circumstances than in settlements, and there appears to be little risk to their relatives. At Gedera a small colony is maintained for those cases for which it is impossible or undesirable to arrange home isolation.

In central Sudan the incidence of leprosy is heavy among certain tribes but rare among the nomads, both the Arabs of Kordofan and Kassala, and the swamp dwellers of the Upper Nile Province. The Nuba Mountains and the southern part of the Blue Nile Province are the main epidemic areas. Here, near and under the supervision of the dispensaries or hospitals, small colonies have been established that with their gardens, wells, and goats or cows are

practically self-supporting as regards food. The amenities offered attract the lepers on a purely voluntary basis; no compulsion is applied and many of the patients leave at certain times of the year to cultivate at home, returning when their work there is finished. There are nine of these colonies in the Nuba Mountains and three have been formed so far in the Fung area of the Blue Nile Province.

In southern Sudan the disease is very common in many parts of southern Equatoria Province, particularly in the Zande district, where ten years ago large settlements were founded to which were admitted all of the lepers found during the frequent routine examinations of the whole population for sleeping sickness. Many of them were discharged later but kept under observation.

The hope then entertained that the disease might be stamped out in a generation has not materialized, because it is almost impossible to diagnose leprosy in its earliest stages on routine inspection. The large settlements at Li Rangu and Source Yuba are still serving a most useful purpose, but it is now considered that the most effective way of dealing with leprosy in other parts of this area is through the native administrations. A scheme, therefore, is being worked out for the chiefs to be responsible for maintaining small colonies, which are to be supervised by the nearest dispensaries, the medical staffs of which are to take an active interest in assisting the native authorities in this matter. It is hoped to educate the people regarding the prevention and cure of leprosy to the point that they themselves will take a more active part in combating it.

In this area 158 fresh cases were diagnosed in 1938, and 72 of them were admitted to the Li Rangu Settlement; the other 86, who were non-infective, remained in their homes under surveillance. The 555 cases that were discharged in previous years but that were still living in the settlement were reexamined; 342 were finally discharged from the settlement as cured or burnt-out, and 213 were readmitted for further observation. At the end of the year there were 1,177 cases in the settlement, of whom 162 were segregated. Hydnocarpus oil by injection has been employed as the standard treatment there since 1937. In the Uba Settlement there were 240 patients at the end of 1938, of whom 60 were segregated. A large part of this settlement has been relocated and it now covers an adequate area. The lepers are comfortably settled in an accessible site, well isolated from the remainder of the colony.