

ABSTRACTS

Early Diagnosis of Leprosy by Study of the Sweat Response to Ionophoresis with Parasympathomimetics. V. MARTINEZ DOMINGUEZ. Bull. World Health Organization, **26**, 1962, pp. 227-231.

The early diagnosis of leprosy is essential to the success of a leprosy control scheme. Simple clinical examination does not always lead to early diagnosis, and skin tests using pilocarpine and histamine employ a complicated technique, and there is a degree of difficulty in interpreting the results. At the 7th International Leprosy Congress in Tokyo in 1958 Prof. Gay Prieto suggested a new technique which utilises the sweat response to the ionophoresis of parasympathomimetic substances. The present article describes in detail the apparatus and how to use it, and how to read the results. Some Tables give the results in healthy skin and in skin of the lesions. In Katsina in Northern Nigeria the consultative team in leprology of WHO tried out the new method, using acetylcholine for ionophoresis. The author reports of 45 skin lesions. In 40 cases sweating was modified. Some cases gave a response of doubtful value, possibly because of an organic defect in the physiological processes of sweating in the people of that part of the world. Total anhydrosis was met with often in the tuberculoid form, and not so much in the indeterminate form. In 5 cases of the 45 the test did not cause any modification in the lesions of macular leprosy. The test on the whole was found to be useful. It is easy to use and previous sterilisation is not needed, which is a great advantage in field work, especially with children. Further trials of the method are now called for.

Isolation of Diphtheroid-like Organisms from Human Leprous Nodules; J. K. SARKAR. Journ. Indian Med. Assoc. **38**, 8, April 16, 1962, pp. 387-388.

On a culture medium prepared from human foetal nerve extract two strains of diphtheroid-like organisms have been isolated from human leprosy lesions. One of these organisms injected into a lepromin-negative guinea pig converted it to lepromin-positive. This organism or its filtrate may therefore possibly be used as antigen in place of lepromin.

Neurological, psychological and psychopathological aspects of leprosy. A clinico-nosographic contribution concerning 75 cases. G. ARGENTA. Monograph of 118 pages, with many illustrations and references, Editrice Calia, Napoli, 1961. (Original in Italian.)

The findings can be summed up as follows:

1. Practically all the patients presented neurological symptoms: in only 8% did the neurological examination give a negative result.

2. In 56% of the cases (42 patients) the onset of the disease was characterized by non neurological symptoms; subsequently, however, 36 of these patients developed neurological signs, many of them in an early stage. In 44% (33 cases) the onset of the disease was marked by neurological symptoms.

3. Most of the patients in whom the disease commenced with non-neurological manifestations were between 10 and 35 years old; patients in whom the nervous symptoms were already present at the onset were of all ages at that time.

4. In 60% of the cases the disease was of familial nature. The criteria of familial character and of geographical origin are of great importance in connection with an early diagnosis of the disease.

5. The beginning of the nervous manifestations was characterized by the following manifestations (in order of decreasing frequency):
 hypo-aesthesia to heat and pain (accidental burning etc.)
 pains, sometimes of truncal, sometimes of pseudo-rheumatic type
 fatigue, depressions, insomnia
 paraesthesia (not painful)
 disturbances of trophism: torpid ulcer, painless whitlow, etc.
 earlier trauma
 psychic disturbances.

6. The objective symptomatology was characterized by:
 peripheral paralysis, with very evident atrophy; the deep reflexes decreased parallel with the atrophy, but they were rarely completely abolished. Sometimes they were lively but without pathological pyramidal phenomena. The atrophy showed a predilection for the musculature of the hands and to a lesser degree of the arms, legs and feet;
 in 10 cases (approximately 13%) without clinically demonstrable atrophy, the hands showed a loss of the capacity to make certain movements connected with the intrinsic musculature; 7 of them proved incapable of opposing the first and fifth fingers; the author ascribes to this phenomenon the significance of early symptom of neurological involvement in leprosy;
 superficial tactile anaesthesia (76%), heat and pain anaesthesia (85%), vibration anaesthesia (20%) and deficiency of the sense of position and movement (4%);
 enlargement of the nerve trunks: the ulnar nerve was palpable on one side in 15% and on both sides in 25% of the cases; the median nerve was palpable in 6% of the cases, the branches of the superficial cervical plexus were palpable in 3% of the cases;
 disturbances of osseous and cutaneous trophism (24% of the cases);

ocular symptoms: corneal opacification (17%), cataract (3%), disturbances of accommodation (2%), disturbances of the pupil reflex, anisocoria, anisocyclia (9% of the cases); parkinsonian syndrome (1 case), ataxic syndrome (1 case), their relations with the leprosy infection are doubtful; psychic disturbances (15%).

7. The topography of the peripheral nervous lesions was studied according to the distribution of the anaesthesia.

The distribution of the anaesthesia in the truncal innervation territories is to be regarded as the most frequent form; the distribution in very large territories (stocking type, glove type, etc.), entering only partially into the truncal territories is the less frequent form, while the form with irregular areas is a little more frequent than the second type mentioned but much less frequent than the first mentioned type; in 4 cases, the possibility of a localisation of the lesion at the radicular level was to be considered.

8. The author comes to a conclusion that according to his own clinical experience "leprosy psychosis" is not to be reputed to exist.

In 2 cases of confusional syndrome with excitement, a specific toxi-infectious mechanism was likely to exist. In the remaining cases (2 depressions, 2 morphine toximias, 1 case of hysteria, 1 case of delusional reaction, 1 hypochondric syndrome, 1 case with dysphoric crises, leprosy has got only a pathogenic value through only a psychogenic mechanism. The psychologic silhouette sprang from the clinical research and mental tests (Rorschach, Wechsler Bellevue Intelligence-test) and is characterized by mental poverty. (We are dealing though with people at a very low standard of education), a pretty balanced affectivity, a rather dysphoric temper.