

MANGANISM IN THE MINES OF FRENCH MOROCCO. J. RODIER and M. RODIER, Bull. Inst. d'hyg. Maroc 9:3, 1949.

According to the Rodiers, manganese is distributed widely in Morocco and constitutes an important part of the wealth of the subsoil of Morocco. Production of manganese is carried out in seven mines; the three largest of them, in Bou Arfa, Imini and Tiouine, furnish 87 per cent of the total production. These three mines employ 740, 800 and 350 workers, respectively. Only 28 cases of nervous manganism were traced among the workers employed in these mines. Thus the incidence of manganism is low in Morocco, but it is still important when compared with the total number of 250 cases reported in the international statistics. In addition to these proved cases, there are incontestably a more considerable number of cases of premanganism characterized by functional disturbances in the absence of objective signs of intoxication.

Observations made on the 28 patients corresponded with the classic descriptions. The clinical syndrome of the toxic condition occurring in persons who work with manganese is characterized at its onset by disturbances which are of a subjective character: cephalalgia, asthenia, hypersomnia, vertigo, spasms in the legs and lumbar pain. Later on there appear disturbances of gait and of speech, tremor and a masklike expression. Muscular hypertonia, predominantly of the extensor muscles, is the essential dominant symptom. The disease, when once established, does not recede.

From the biologic point of view observations were as follows: The manganemia among the authors' patients and among those who had been in contact with the metal varied considerably. The classic polyglobulism due to manganese was not observed by the authors, but the patients presented an inverted leukocyte count with a pronounced increase in the number of lymphocytes. There was no constant increase in coproporphyrinuria, but the percentage of increased coproporphyrinuria was of considerable importance among the patients. There seemed to occur a disturbance of sulfur metabolism, but these observations should be verified in further studies.

The lungs play an important part as a route by which the poison spreads within the organism. The elimination of the manganese is very slow. It is effectuated largely by the bile and the feces. There is practically no urinary elimination.

Manganese poisoning is intimately linked with the copiousness of the mineral, with its degree of oxidation, with the size and the shape of the dust particles, with the specific work for which the workers are employed and with the methods of exploitation. The work in the mines of Imini and Tiouine is associated with the greatest risk because of the simultaneous occurrence of several of these factors.

In general, the means of protection, whether individual or collective, are insufficient at the present time. Prophylactic measures are recommended which should be based on medical and laboratory control, including leukocyte count, determination of manganemia and of coproporphyrinuria, and on technical measures aimed at combating the dust.

TREATMENT OF SILICOTIC PNEUMOCONIOSES. A. HANAUT and L. ROCHE, Presse méd. 58:589 (May 27) 1950.

According to Hanaut and Roche, there is no specific treatment for silicotic pneumoconioses. Prevention of these occupational diseases presents the only effective type of treatment.

Symptomatic treatment of silicosis not complicated by catarrhal bronchitis, tuberculosis or heart disease, as well as preventive and curative treatment of these complications, is of considerable importance for the prolongation of life of silicotic patients and for alleviating their suffering during the last stages of the disease.

Dyspnea frequently may be the only symptom of uncomplicated silicosis. Its physiopathological mechanism is still unknown, but disturbed respiratory function