have never seen clinically a case that could be so diagnosed, and in about two hundred autopsies performed have seen nothing that could suggest it. However, the question raised by Professor Arning should be investigated thoroughly in order to settle it once and for all.

Comment by Dr. H. W. Wade, Culion, P. I.

Since the latter part of 1921 a large number (nearly 2,500) of autopsies have been performed at Culion by several pathologists, in various degrees of thoroughness. Only a minority of these cases have been investigated intensively—there is far too much of this material for that—and most of them have been done on the basis on which routine autopsies are made in the ordinary general hospital, at the request of the clinicians to check their diagnoses. However, the pathologists have naturally been alert to observe anything unusual in the viscera ordinarily examined, and histological examination of the principal organs has usually been made.

Speaking for myself, I have always been interested in the question of the existence of lesions like those pictured by Danielsson and Bock in their atlas and described by Arning, and have long since been of the same opinion as most of the European workers, that they must have been due to tuberculosis. It has seemed to me significant that, so far as I am aware, nothing of the kind has been described as due to leprosy since more familiarity with the etiology of tuberculosis has gained than existed in the middle of the eighteen—though it is to be admitted that that very familiarity might lead one to ascribe to tuberculosis lesions that could be of other origin.

Be that as it may, the fact remains that at Culion we have encountered nothing in the viscera that resembled tuberculous lesions that could not be ascribed, both grossly and microscopically, to that infection, and only exceptionally have lesions been encountered that could be suspected of being of tuberculoid lepromatous nature so far as we know such lesions. It is true that in only a few instances have guinea-pigs been inoculated (direct culture work would usually be unsatisfactory with unrefrigerated autopsy material in this climate), but those animals that have been inoculated have all become tuberculous. Despite special interest in the tuberculoid condition in leprosy, I am as yet unconvinced that it occurs in the visceral organs, but agree that special efforts should be made in different regions to settle the question definitely.

"LEPRA REACTION AND METEOROTROPISM"

To the Editor:

Dr. A. A. Stein, of Leningrad, has offered [the JOURNAL 3 (1935) 137] interesting suggestions as to the relation of lepra reactions and climatic conditions, he having found them to be most frequent under unstable atmospheric conditions. It is true, as he says, that various disease manifestations occur more frequently at the time of weather changes than during stable weather. Peterson, of Chicago, in his recent book "The Patient and the Weather" stressed
this same point. I have made similar observations with regard to attacks of acute appendicitis and also with suicides; periods of falling barometric pressure and rising temperature (the "warm front" periods) show a tendency to be accompanied by waves of suicides and acute appendicitis. Pneumonia and many other infectious diseases also show such a weather influence, and the same is true of eclampsia.

Stein found the great majority of his lepra reactions in Leningrad to fall on days of changing weather, only 6 out of 86 occurring during stable weather. Unfortunately, beyond saying that "in summer, and to some extent in winter, when the weather is stable," he does not indicate how much stable weather is experienced at Leningrad. It would have been useful had he indicated what proportion of the days out of each year are characterized by stable weather.

In the stormy regions of the north temperate zone, such as the northern United States and the Baltic Inlet of Europe, there are few days in each year when meteorologic conditions could be so characterized. Usually, with the frequent passage of "highs" or "lows," our atmosphere would be classed as distinctly unstable. Leningrad receives frequent cyclonic changes that pass over the British Islands and up the Baltic Inlet. Since reading Stein's paper I have seen weather data from Leningrad for 1906; from them it appears that very few days of the year could be classed as "stable." Perhaps Stein, in an early number of the Journal, can give a graph of the temperature and pressure behavior for the full year of 1920, indicating the timing of his lepra reactions so that we can form a better idea of just what relation the reactions bear to weather changes.

When I was at the Culion Lepor Colony early in 1936, at the time Stein's article was in press, I was told that it was intended to follow-up there his suggestive findings. That should give valuable information along this line, for temperature and pressure changes take place in the Philippines much more independently of each other than in temperate regions. The findings in the large mass of patients at Culion, of whom it is said that some 0.5 per cent are in the state of lepra reaction at any given time, will perhaps give us a clue as to just what meteorologic factors are active in producing disease reactions in patients. With the tropical typhoons the barometric pressure drops markedly with relatively little temperature change, while at other times of the year temperatures may show considerable fluctuation while the pressure remains stable. The results of an analysis
of lepra reactions in Culion or Manila in relation to weather changes would be of great interest to those working on this general problem.

Cincinnati, Ohio
C. A. MILLS, M.D.
Professor of Experimental Medicine

To the EDITOR:

We have heard from sundry correspondents that Dr. A. C. Deckelman is representing the American Mission to Lepers in South America. It is only fair to say that so far as we know we have never seen Dr. Deckelman. We have had no correspondence with him, and he is not authorized to represent the American Mission to Lepers directly or indirectly in any capacity. If any representation of this sort is made we can simply say it is without our knowledge or consent.

W. M. DANNER
General Secretary

A NEW CHAULMOOGRA DERIVATIVE

To the EDITOR:

In a recent issue of the Journal [3 (1935) 237] there is a news item referring to a new chaulmoogra derivative which leads us to believe that the product referred to is phenylethyl hydnocarpate, which we have prepared experimentally.

It was pointed out to us that some patients appeared to be extremely sensitive to ethyl esters of hydnocarpus oil, and that for such cases it was desirable to have a product of minimum irritation. A number of esters were made with different alcohols, using a fraction of H. wightiana acids from which the specially irritant oxidation products had been eliminated [the Journal 2 (1934) 149]. These were tested pharmacologically and the phenylethyl hydnocarpate proved to be one of the least irritating.

It was hoped that it might also be useful for oral administration to patients unable to tolerate chaulmoogra and hydnocarpus oil by mouth, and preliminary trials have indicated that it is well tolerated.

In England it has been tried in cases of lupus with, we understand, promising results in a fair proportion of cases, and we are informed that results of one of these trials will be published shortly.

We have so far not felt justified in issuing this preparation as one of our regular products, because so few trials have been made with it, but we have maintained a small stock for sale to leprologists who may care to experiment with it. It should be understood that it is not suitable for large scale treatment of leprosy, being more expensive than ethyl esters, but it appears to be worth trial for specially sensitive cases of the type already referred to.

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