MEDICINE

## Dyes Raise False Hopes In Leprosy Treatment

## Leprosy Authority Says Brilliant Coloring Substances Not Effective; How Disease is Transmitted Still Unknown

THE RECENT report of the "cure" and "control" of leprosy through treatment with various dyes is an example of a spectacular method of disease treatment that does not fulfill the original claims made for it, Dr. E. B. McKinley, dean of the George Washington University School of Medicine, commented in response to a request by Science Service.

"Here is one of the most tragic diseases known to man, the social and economical implications of which are extremely profound," Dr. McKinley said. "To raise false hope in these patients is not only inhuman but therapeutically detrimental to them since the mental attitude of these patients towards their course of treatment is an important factor in their clinical progress. A new disappoinment does not contribute to their morale."

So far as is known dyes for the treatment of leprosy were first employed in the Philippines about twelve years ago, according to Dr. H. Windsor Wade, Medical Director of the Leonard Wood Memorial and Editor of the International Journal of Leprosy. This work was not followed through to any definite conclusion.

## Preliminary Report Hopeful

In June, 1933, Dr. Gordon A. Ryrie, Medical Superintendent, Federal Leper Settlement, Sungei Buloh, Federated Malay States, reported upon the use of various dyes, such as trypan blue, brilliant green, fluorescein, eosin, methylene blue, crystal violet, and many others in the treatment of leprosy. Intravenous injections of these various dyes were given to a total of 85 patients. Dr. Ryrie reported that with a few of these dyes there seemed to be a definite diminution of the "external manifestations of leprosy" which were "accompanied by other signs of clinical improvement." However, Dr. Ryrie reprovement." However, Dr. Ryrie requested that his report be considered preliminary" in nature and suggested further trial.

By October, 1933, four months after this first report, Dr. Ryrie stated in the *International Journal of Leprosy* that he did not think that the experiment had reached the stage at which it is of therapeutic value, for he had found that about forty per cent. of those patients who improved during treatment with the more successful dyes had definitely relapsed, the lesions of leprosy appearing on the same spots from which the old ones had retrogressed, or partially disappeared.

Commenting upon this work of Dr. Ryrie, the editor of the *International Journal of Leprosy* stated that "Even if dye therapy may not produce complete cures, it may well prove to be highly advantageous if in any proportion of

cases it will cause rapid recession of lesions to a certain point, provided that improvement can be continued from that point by more ordinary, slower methods." However, he also stated, care should be taken lest extravagant expectations be aroused on the part of patients and the public at large during this uncertain, experimental phase of the matter. In this Dr. McKinley expressed hearty agreement.

More recently a new claim has been made that a dye treatment will prevent or lessen the contagiousness of leprosy. This is manifestly an extravagant claim and one entirely without foundation for, as yet, we do not know how leprosy is transmitted from patient to patient, Dr. McKinley said. If leprosy is contagious, as we believe, it is only mildly so and such claims as these, not founded upon scientific demonstration, are not to be taken seriously either by physicians or the public.

That various dyes may eventually prove to be useful in the treatment of leprosy is possible but for the present it must be stated that their use has not been acceptably established and the work so far reported is only suggestive. Dr. McKinley therefore suggested that



CLOUDS SHOW HOW THE WIND BLOWS

There are no straws to show how blows the wind in the upper air, but there are clouds. By studying their reflections on the black glass of the instrument called the "nephoscope," meteorologists can gain information about direction and velocity of winds high above the mountain-tops; this is of value to aviators and weather forecasters. The nephoscope is playing an important part in the present International Cloud Year. The cloud prominent in the above picture is of the type known as lenticular strato-cumulus; it is very rare except in mountainous regions.