

Rs. 18,306 from his friends, and Khan Bahadur K. A. Malek who presented an ambulance car. The report contains short clinical notes on sprue, pellagra and tropical macrocytic anæmia.

The tuberculosis hospital with three wards of 12 beds in each and five private rooms was opened in 1941. It is always full. Tuberculosis is said to be the 'most malignant disease in Gujarat'.

## Correspondence

### GUINEA-PIG INOCULATION IN THE DIAGNOSIS OF TUBERCULOSIS

SIR,—In his paper C. B. Dhurandhar (*Indian Journ. Med. Res.*, 29, 3rd July, 1941) has detailed a very useful piece of work, and the attention of many has been drawn to it. Should the suggestion in the paper by Dhurandhar be accepted the outlook of the diagnostic method is bound to change.

In fact many laboratory workers will recollect a circular asking for results of guinea-pig inoculation in their respective laboratories. From my laboratory, prior to 1942, I could find no positive result of inoculation recorded. The number of examinations were far too few, extending over many years, and no record of the method adopted and the accurate detail of technique, nor the clinical picture is available. I took up this question soon after receipt of the circular. The type of case selected was the one with persistent pleural effusion and the method adopted was briefly as follows:

Three c.cm. of 3 per cent citrate in saline was put up in 2 ounce McCartney bottles. The bottles were sterilized. Fluid was directly received into the bottle. When material was sufficient, part of it was used for direct examination; there was no positive result. Depending on the dilution, 5 to 7.5 c.cm. was injected intraperitoneally into guinea-pigs. A preliminary set of animals used to find out the suitable period showed that infection failed to occur at the end of 4 weeks. Number of the tests has been six, the control animals showing positive infection at the end of 6 weeks. The results are that out of 8 cases, 6 were positive and 2 negative. I have been unable to do parallel culture.

In November 1944 I happened to mention this at a meeting of teaching pathologists in Bombay. As a result of the discussion I undertook to inoculate guinea-pigs with known number of organisms from a strain kindly lent by Professor R. G. Dhayagude of the G. S. College. The culture was emulsified, and the emulsion in concentration of 1,000 organisms per c.cm. was prepared. Animals were inoculated with 1 c.cm.,  $\frac{1}{2}$  c.cm.,  $\frac{1}{4}$  c.cm., i.e. the number of organisms being 1,000, 500, 250, respectively. All animals showed tubercles in the spleen at the end of 8 weeks. The lesions were scraped and tubercle bacilli demonstrated.

My experiments have been few, yet the results are encouraging enough to warrant a re-examination of this problem. Dhurandhar has used the subcutaneous route throughout his investigations. I am inclined to think that the intraperitoneal route is the better one. I am not in a position to comment on the question of susceptibility or otherwise of different strains of guinea-pigs.

P. V. GHARPURE,  
MAJOR, I.M.S./I.A.M.C.

DISTRICT LABORATORY,  
BOMBAY.

### HYPODERMIC SOLUTION OF SULPHATE OF QUININE

SIR,—I think the following abstract from *The Madras Monthly Journal of Medical Science* of June 1872, page 420, will prove that the use of quinine sulphate for preparing hypodermic solutions is really much older than most of us imagine:—

'On hypodermic solution of sulphate of quinine.—By Assistant Apothecary William Hamilton, acting assistant to the professor of chemistry, Madras Medical College.'

'The following are the proportions which yield a solution suitable for hypodermic injection—

Quinia sulphate	..	..	10 grains
Diluted hydrochloric acid	..	..	8.5 minims
Water	..	..	10 minims'

K. A. SHAH.

RANCHHODLAL DISPENSARY,  
AHMEDABAD,  
6th May, 1945.

## Service Notes

### APPOINTMENTS AND TRANSFERS

LIEUTENANT-COLONEL A. K. SAHIBZADA, O.B.E., Assistant Director-General, Indian Medical Service (Recruitment), is appointed to officiate as Deputy Director-General, Indian Medical Service, with effect from the 27th December, 1944, vice Colonel S. L. Bhatia, M.C., I.M.S., deputed *ex-India*.

Major H. B. Wright, Deputy Assistant Director-General (M.S.), Medical Store Depot, Calcutta, is transferred as Deputy Assistant Director-General (M.S.), Medical Store Depot, Madras, with effect from the afternoon of 22nd March, 1945.

Major W. T. Taylor, Deputy Assistant Director-General (M.S.), Medical Store Depot, Madras, is transferred as Deputy Assistant Director-General (M.S.), Medical Store Depot, Bombay, with effect from the afternoon of the 6th April, 1945.

Captain D. H. Harrison, an officiating Agency Surgeon, is posted as Civil Surgeon, Zhob/Loralai, with effect from the forenoon of the 27th February, 1945.

### INDIAN LAND FORCES—INDIAN MEDICAL SERVICE SECONDED TO THE INDIAN ARMY MEDICAL CORPS (Emergency Commissions)

#### To be Captains

J. L. Jogota. Dated 19th December, 1944.  
S. Ghosh. Dated 20th January, 1945.  
Alfred Saldanha. Dated 2nd February, 1945.

#### To be Lieutenants

3rd April, 1943

A. J. E. Bradfield. S. H. Barker.  
Arsene Lazare. D. M. Gomez.  
Robert Henry Baker. Dated 25th July, 1944.  
Satyendra Singh. Dated 16th September, 1944.  
Gora Chand Dhar. Dated 7th November, 1944.

16th January, 1945

Basil William John Ince.  
Desmond Andrew William Nugent.

17th January, 1945

H. L. Dutta.  
Mahalingamoorthy Natarajan.  
Govindappa Venkataswamy.

19th January, 1945

G. D. Dhavle.  
Ramamritham Tyagarajan.  
Mohamed Abdul Jameel.  
Durairaja Ayyar Lakshmanan.  
Lakshman Sathyavageesswaran.  
Gopala Kuppaswamy.

20th January, 1945

Shermadevi Palvannasundara Subramanian.  
Varadarajalu Nandaraman.  
Ulaganatha Sankaranarayanan.  
Kochat Purushothaman.