that the sensitizing fixation of antibodies—producing a condition of passive anaphylaxis—does not require the maintenance of the organ in a state of physiological activity at body temperature.

Bacterial antigens.—Dr. Elford has initiated a physico-chemical study of the molecular dimensions of these antigens, and of the polysaccharide haptenes which can be dissociated from them.

Leprosy

Sir Patrick Laidlaw has made experiments which have an interesting bearing on the relation between human leprosy and that occurring in the rat. The rat disease, which is caused by an organism very similar to that found in the leprous lesions of man, is relatively rapid in development and is transmitted without difficulty from rat to rat; but there was only one previous record of a successful attempt to transmit leprosy to the rat by material from a case of leprosy in man. During the past year material from cases of human leprosy in the Belgian Congo had been sent by air mail to Dr. A. Dubois of Antwerp, and this had been used to inoculate Syrian hamsters.

With this material Sir Patrick Laidlaw found it remarkably easy to transfer a rapidly spreading infection not only to hamsters but the readiness with which the infection was transmitted to rats as well as hamsters, and the observations made on the tissues of these animals after death, suggested to Sir Patrick Laidlaw that the human lesions from which the material was originally obtained were due to infection with the organism of rat leprosy, and not with the organism of the usual human type. This opinion has been confirmed by Dr. Dubois and also by Professor Adler, to whom microscopic preparations and descriptions of the findings were submitted.

With regard to the infection of hamsters with the bacillus of typical human leprosy, it is important to distinguish mere survival of organisms at the site of inoculation from active multiplication and infective spread to other tissues. Sir Patrick Laidlaw has accordingly studied the behaviour of a number of other mycobacteria. Such organisms differ from true leprosy bacilli in being capable of growth on artificial media. In most cases they could be recovered from the sites of inoculation in hamsters as long as six months after injection; but the survival was strictly local, no organisms being found in the lymph glands, spleen, liver, or other organs. A mycobacterium obtained from butter survived for months in this restricted manner, as well as those which had originally been found in association with leprous lesions.

Protistology

By the methods which had already proved so fruitful in the study of the life-cycles of *Entamœba histolytica* and *Entamœba coli*, Mr. Dobell has now worked out a large part of the life-cycle of *Endolimax nana*. He has made further progress with the study of the intestinal flagellates of these hosts, and the knowledge of them required for practical purposes is now nearly complete. Attention has also been given to the flagellate commonly found in the human mouth, with a view to deciding the proper nomenclature of this organism.

[These are a few abstracts from this interesting and valuable report which is all we are unfortunately able to find space for. Important work has also been done on chemotherapy and endocrinology and many other subjects. Apart from the amount of information obtained in this report the list of 37 special committees at the end indicates the wide scope the activities of the Medical Research Council covers. All research workers should have a copy as from it they may gain ideas for lines of their own researches or, on the other hand, be prevented from overlapping in work that is being efficiently pursued elsewhere. It is published by His Majesty's Stationery office and the price is three shillings.—EDITOR, *I. M. G.*]

Correspondence

ROUTINE TREATMENT OF EPILEPSY, WITH SNAKE VENOM

To the Editor, THE INDIAN MEDICAL GAZETTE

SIR,—Cobra and Russell viper venoms are used together in the treatment of epilepsy. The former acts as an anticonvulsant drug, and also probably reduces sensitivity of the higher centres to extraordinary incoming impulses. Russell viper venom appears to alter the mineral and water metabolism and thus influences the epileptic convulsions. In addition to this, extract of *Rauwolfia serpentina* is added to the venom therapy since it is a good nerve sedative, hypnotic and lowers blood pressure, and thus lowers cerebral excitability. The treatment may be detailed briefly as follows:—

ROUTINE TREATMENT OF EPILEPSY WITH VENOMS

Drugs to be used:—

(1) Cobra venom 1 to 10 mouse units (m. u.).
(2) Russell viper venom 2 to 20 mouse units.
(3) Extract *Rauwolfia serpentina* 10 to 30 drops in water, twice daily.

Treatment:—

Intramuscular bi-weekly injections of cobra and Russell viper venom, mixed together in the following doses:—

Dose no. 1. Cobra venom 1 m. u. and Russell venom 2 m. u.

Dose no. 2. Cobra venom 2 m. u. and Russell venom 4 m. u.

Dose no. 3. Cobra venom 3 m. u. and Russell venom 6 m. u.

So on till 10 doses are administered. Rest for one month and repeat the above course again.

Three to four such courses to be completed, later on one course every six months.

Record of the fits, the dates of occurrence and duration of fits to be recorded, regularly, throughout the treatment.

Extract Rauwolfia serpentina:—

Ten to thirty drops to be given in an ounce of water at bedtime and early morning or when the fits are anticipated. Doses of rauwolfia and venom may be regulated according to the local and general reaction and according to the response of the patient.

Bromides and luminal:—

These may be given in the beginning to control the fits, and the latter drug if fits are very frequent and severe in type. Dilantin Sodium Kapseals (Parke, Davis & Co.) is another good drug worth trying. It has been reported to have given encouraging results and is preferable to luminal.

A paper on the above treatment as employed at the School of Tropical Medicine, Calcutta, was read in the Physiological Society in January 1940.

Yours, etc.,

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CALCUTTA,
23rd March, 1940.