0.6 per 100,000 in January, 1917, about which level it remained till the end of the war.

At the conclusion of the demonstrations, General Bassères explained that he considered this course of instruction as being of much more use and much less costly than ordinary manoeuvres in which only a small proportion of those attending could see each type of formation and the various specimens of apparatus.

THREE UNUSUAL CASES IN ONE MONTH.

By MAJOR J. T. D. DOUGLAS.

Royal Army Medical Corps.

One often hears both outside and inside the Service that army doctors see and get no experience in unusual and rare cases, and that their cases are confined to a stereotyped and limited class.

During one month at this small hospital and station the following cases occurred:—

(1) Henoch's Purpura.—A young girl of 15, daughter of Serjeant L., subject to a rheumatic tendency, reported sick with pains in her limbs, and a petechial rash. Several years ago she had a severe attack of diphtheria and was treated with antitoxin. She also suffered from rheumatic pains and stiffness for the last few years, so that the rash was at first thought to be one of peliosis rhumatica. However, in a few days she developed slight temperature with acute abdominal pains and hemorrhage from the bowel. She was immediately put on a course of calcium chloride and a mixture of iron and arsenic to combat the anemia, which was severe.

She eventually made a good recovery, except for a slight relapse.

(2) Landry's Paralysis.—A married serjeant of one of the depots reported sick in his quarters with tingling in tips of toes and fingers. He had recently returned from an educational course in the south of England, where he had evidently worked very hard, and taken very little exercise. He was a man of poor physique and rather neurasthenic.

On the third day of his treatment in quarters he was transferred to hospital. There was no other history except that the day before he went sick he had lost control over the finer movements of his fingers, and dropped the chalk while writing at the blackboard in the school.

On examination there was paresis of both legs, as also slight paresis of both arms. Reflexes were absent, thermal and tactile sensations diminished and delayed. Complained also of a drawing pain between the shoulders. Wassermann negative.

On the third morning in hospital I noticed fibrillary twitchings of a muscle in his hand, and also a slight slurring of his speech, and came to the conclusion he was suffering from an acute ascending paralysis with "bulbar paralysis."

He had not lost control over bladder and rectum.

He was transferred the same afternoon to the local civil hospital for nursing, but at 8 p.m. the same day he died.

The post-mortem showed general acute toxic change in the spinal cord with

Current Literature

an encephalitis. No cause was found, but owing to the recent epidemic of influenza the influenza bacillus may have been the agent.

(3) Cerebral Tumour.—Serjeant P., who had had long service in India, was admitted to hospital on May 15, 1922. There was no history of previous illness except frequent attacks of malaria while in India.

His only symptoms were intense frontal headaches at intervals. Wassermann negative. The day before his transfer to York he developed cerebral symptoms, i.e., incoherent muttering about his life in India, and some ataxia, but in the intervals he was quite rational.

He died on June 5, at York, from a cerebral tumour which, I believe, is being reported in the Journal in detail.

Current Literature.


General Immunity by Local Immunization. By A. Besredka.

(a) Dysentery Bacillus.

The mechanism of the infection and of the defence in regard to the rabbit intestinal infection and intestinal immunity.

The problem of vaccination is, as has been shown, simple in the case of bacilli such as anthrax in which case it is necessary to immunize the skin; it is not so simple in the case of dysentery, typhoid and paratyphoid which show, in appearance at least, an equal virulence for all organs.

Laboratory animals can be killed by injection of these bacilli by a variety of routes.

It is usual to vaccinate against these bacilli by the subcutaneous route.

The buccal route of vaccination has been tried from time to time but with little success in the laboratory animals. It is nevertheless the buccal route which will be shown to be the most efficacious against the bacilli in question.

It is well known that when rabbits are injected with fatal doses of dysentery bacilli the organ most readily attacked, if not the only one, is the intestine.

In natural conditions in infection by dysentery, cholera and typhoid the port of entry is the mouth.

Animals are more protected against infection by this route than is man. It is difficult to infect rabbits or guinea-pigs by this route.

But if infection is made by the peritoneal route or by the blood stream it is the intestine which is attacked and suffers; the intestine is therefore the susceptible organ.

As regards dysentery specially, if a suitable dose is given in the ear vein of a rabbit it dies in twenty-four to forty-eight hours.

If examined soon after death, the blood, the urine and the organs are all sterile but the intestine from the gall bladder to the caecum swarms with Bacillus shiga. They are so numerous that they replace the normal inhabitants of the intestine—B. shiga reigns alone.

The bacillus is not spread through the body but is found only here; there is a strong attraction for them in the intestinal mucous membrane.

The same thing occurs if the bacilli are introduced by the peritoneal route or by the subcutaneous; they do not remain in the tissues or peritoneal cavity—they pass to the intestine where they multiply rapidly.

The intestine is to the B. shiga what the skin is to the anthrax bacillus.