

## OUR PRIZE COMPETITION.

STATE WHAT YOU KNOW OF URÆMIA. TO WHAT ARE THE SYMPTOMS DUE? WHAT ARE THE ESSENTIAL POINTS IN THE MANAGEMENT?

We have pleasure in awarding the prize this week to Miss J. Pepper, 3, Niedenwald Road, Sydenham, S.E. 26.

### PRIZE PAPER.

The cause of uræmia is the retention in the blood and tissues of some of the toxic excrementitious matters that ought, either themselves or in some changed form, to be excreted by the kidneys.

Analyses of the blood in uræmia have not generally shown a large proportion of urea; but it is found in the gastric and intestinal secretions, in the dropsical fluid under the skin, and it has been secreted by the sweat glands on to the surface of the skin, actually forming crystals, which give the skin the appearance of having been dusted with flour or pounded sugar.

The most striking symptoms are the uræmic convulsions, or uræmic eclampsia. These have a close resemblance to the ordinary attack of epilepsy. There is often a short tonic stage, and then general clonic convulsions of all the muscles of the limbs, face, eyes and trunk. The face becomes livid, there is frothing at the mouth, the saliva may be tinged with blood, and the pupils are dilated. After some minutes the convulsions subside, and the patient lapses into a state of coma, from which he may again pass into convulsions; and these are repeated again and again, with intervals of complete coma. During the convulsion the respiration is hurried, and the pulse is small and quick; the temperature is variable, and it may reach 104° F., or higher. Thus convulsion and coma succeed one another; but either may occur separately. Sometimes coma comes on quickly; or more slowly, drowsiness gradually increasing to stupor, and complete unconsciousness in a few hours. A temporary paralysis is sometimes observed.

The patient's tongue should be protected during the convulsions by placing something between the teeth.

It is also after convulsions that blindness (uræmic amaurosis) gradually occurs—it rarely precedes the fits, or happens without them. It may last from one to three days, and frequently passes off entirely. Deafness may also be noticed.

The chronic symptoms are headache, twitching of the muscles without loss of consciousness, recurrent attacks of dyspnoea, anxiety

and restlessness, or somnolence and stupor, itching of the skin, vomiting and diarrhoea.

Coma is usually treated by purgation, and pilocarpin is often ordered. Vomiting will require effervescing mixtures. The convulsions are usually controlled by whiffs of chloroform.

### HONOURABLE MENTION.

The following competitors receive honourable mention:—Miss Henrietta Ballard, Miss M. Jameson, Miss P. Thompson, Miss N. Matthews, Miss F. Jackson, Miss Alice M. Burns.

### QUESTION FOR NEXT WEEK.

What are some of the reasons for the shortage of nurses to-day?

## MEDICAL MATTERS.

### THE DESTRUCTION OF THE MALARIAL MOSQUITO.

The brilliant results of the work of scientists, notably the late Sir Patrick Manson, in identifying the anopheles mosquito as the carrier and transmitter of the poison of malaria are well known. The larvae of this species of mosquito feeds on the surface of the water, automatically drawing into the mouth floating particles by producing microscopic whirlpools by the aid of a special organ. The method chiefly employed for the destruction of the anopheles mosquito has been by using oil, which floats on the surface of the water, and so suffocates the mosquitoes.

The habit of the anopheles in feeding has led M. Roubaud, of the Pasteur Institute, Paris, to study the efficacy of powdered formaline (Troixymethylene) as a destructive agent, and he finds that, sprinkled on the surface of the water they inhabit (one part powdered formaline to ten parts of fine sand) it forms an imperceptible deposit, and is swallowed by the larvae, which, being so minute, are poisoned by the small quantity of formol given off by the powder, while cattle and fish are unharmed. The quantity used is 25 to 50 powdered centigrams to a square metre of water.

M. Roubaud is now working at a method for the destruction of the larvae of the ordinary mosquito, and hopes soon to make an announcement on the subject.

### THE ALFRED JONES RESEARCH LABORATORIES.

New Research Laboratories, named after the late Sir Alfred Jones, who, during his life took so great an interest in the pioneer work done at Liverpool in the investigation of tropical diseases, have been opened in that city. Sir Alfred made provision in his will for

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