## GIVE SYMPTOMS AND TREATMENT OF OPIUM POISONING.

We have pleasure in awarding the prize this week to Miss J. G. Gilchrist, Gillespie Crescent, Edinburgh.

## PRIZE PAPER.

Opium is a valuable drug, which may be taken in many forms-chewed, smoked, drinking the tincture, laudanum, taking the alkaloid morphia in fluid or tablet form, such as is used in cases of severe illness. It is the constituent in certain drugs, *i.e.*, chlorodyne and many of the soothing syrups. To young children it is peculiarly poisonous.

Symptoms are sometimes divided into two stages :---(1) Excitant stage, when the person may have an excited look, and speak in an unusually brilliant and exaggerated manner. A good deal depends on the nature of the person, and as a general rule (2) the depressed stage is far more marked and typical. The pupils become contracted until they assume the characteristic "pin point" pupil especially associated with the poison. This symptom is of great importance, especially if the patient has not been under observation, as it differentiates from other poisons, more particularly alcohol. It is most marked in the earlier stage; later on, when the poison is paralysing the vital centres, the pupil very commonly dilates. The skin is cold and clammy; the face pasty and white; the pulse feeble and often slow; the extremities cold; the expression apathetic; consciousness is markedly decreased, and sensation greatly dulled; there is no true paralysis present, but great lassitude and drowsiness, with inclination to go to sleep. There may be odour from the breath. If the patient has been addicted to the habit of taking opium, he is often spare and emaciated in appearance. In some cases the patient may become cyanosed, and the skin absolutely wet, due to the fact that opium checks all secretions except that of the skin, which is greatly increased.

The immediate treatment is to keep the patient awake and to stimulate the respiratory system, and get rid of the poison by strong emetics. In mild cases the patient may be made to walk about, which is dangerous in advanced cases, when artificial respiration must be resorted to. A stomach wash-out is best if it can be managed. Stimulants given may be hot strong coffee, if necessary by rectum, hot cloths over heart, hot bottles to the feet, massage, local stimulation with a wet towel, and cold cloths to the head, is sometimes useful, also ammonia smelling-salts. Alcohol

in small doses may be given (a teaspoonful every five minutes), or hypodermic injection of ether or some heart tonic ordered by the doctor in charge. The most important antidote is belladonna, a small dose of atropine injected making the heart contract much more vigor-ously. This is due to the fact that while opium stimulates the inhibitory nerves of the heart, belladonna poisons or paralyses them.

Emetics given may be that which is most quickly attainable, such as a dessertspoonful of mustard, or 20 grains sulphate of zinc, or 20 grains ipecacuanha powder, or two tablespoonfuls of ipecacuanha wine in a tumbler of warm water. The safest and best is perhaps mustard and water, if the patient can be persuaded or made to swallow it.' It is prompt and efficient, besides acting as a stimulant without affecting the nervous system, such as tartar emetic, which is a depressent.

When opium is being given as medical treatment, special care and watchfulness should be observed with those where there is any indication of kidney trouble, or secretions about the bronchial tubes, or any condition tending to devlop into a state of coma.

## HONOURABLE MENTION.

The following competitors receive honour-able mention :---Miss D. W. Maton, Miss Kathleen Dinsley, Miss H. M. Springbett, Miss D. Vine, Miss Amy Phipps, Miss G. Robinson, Miss P. Jones, Miss Gladys M. Evans.

Miss Gladys M. Evans writes :---

The breathing is slow, quiet, and shallow; and these characteristics become more and more marked as death draws nigh, the person dying as the result of paralysis of the respiratory centre of the brain. The lips and face become livid and covered with cold sweat, and the pupils are much contracted. Opium has also an important action upon the nervous mechanism which controls the size of bloodvessels, and consequently in cases where inflammation is present and blood-vessels are dilated its early use greatly checks the inflammatory process. As a rule, death occurs in from 7 to 18 hours after the dose has been taken.

Miss D. W. Maton writes :-

Opium is a powerful narcotic, obtained from a species of poppy grown in Turkey and Asia Minor, which may be introduced into the body in several forms, such as :--(1) Morphia (the principal alkaloid of opium), (2) laudanum (tincture of opium), (3) paregoric (compound tincture of camphor, containing laudanum), (4) syrup of poppies, (5) codeine, (6) chlorodyne.

QUESTION FOR NEXT WEEK. What is Septic Pneumonia? How should it be treated?



