

## OUR PRIZE COMPETITION.

The prize will not be awarded this week, as of the papers sent in none are sufficiently good for publication. As Cerebro-Spinal Meningitis and its treatment is of unusual interest—as it is an infectious disease—for the sake of the public, trained nurses should learn all they possibly can concerning it.

In a recent number of the *American Journal of Nursing*, a little paper by Miss Anna Patt and Miss Militz is instructive from the nurse's point of view:—

### CEREBRO-SPINAL MENINGITIS.

"Cerebro-spinal meningitis is an acute infectious disease characterized by inflammation of the membranes covering the brain and spinal cord. The epidemic form is caused by the *Diplococcus cellularis* of Weichselbaum. The disease is most common in thickly-settled districts.

"The period of incubation is uncertain—probably short, but one patient became ill two weeks after having been exposed. The onset is very sudden, usually with a chill, intense pain in head, neck, back, and joints, and uncontrollable vomiting. This, however, lasts only a short time. The muscles become rigid, and those of the face may be contracted. The opisthotonus may or may not be marked. (In one case, the patient was compelled to lie on his abdomen.) Eye conditions, such as inequality, strabismus, photophobia, or conjunctivitis, and ear conditions may also be present. Occasionally herpes occur on the lips and eruptions on the skin. These eruptions give the name of 'spotted fever.' The bowels are very constipated, the stools are usually a greenish brown mucus. Retention or incontinence of urine is not uncommon. The temperature and pulse vary. The pulse may be either very slow, normal, or rapid. The temperature may be subnormal and there is usually an extreme rise shortly before death. Kernig's sign is practically a positive symptom.

"*Treatment.*—As soon as possible a lumbar puncture is done. If the fluid withdrawn is purulent or other symptoms are positive, 40 c.c. of Flexner's antimeningitis serum are injected into the spinal canal. The serum is injected very slowly, as it at first stimulates respiration and later depresses both the respiratory and circulatory systems. After the injections, the patient usually complains of severe pain in the head, which lasts several hours. Spinal fluid is measured and a laboratory examination is made. Although the diplococci

may not be present in the early stages, the treatment is continued if other symptoms are positive. The typical fluid is very purulent and comes under unusual pressure, but in the first stages it may be as clear as the normal.

"Three injections of 40 c.c. each of antimeningitis serum are given the first twenty-four hours. Usually the same amount of serum is injected as fluid withdrawn, but this may be varied. If the fluid drops slowly and without pressure, an aspirating syringe is used, or if none is withdrawn the spinal canal may be flushed with sterile normal saline solution before the serum is injected. In the early stages of the disease patients are usually delirious, but the delirium should cease after the first three injections or after the second day. According to the severity of the attack and the age of the patient, 40 c.c. are given daily; about 200 c.c. is the usual amount. A general anæsthetic of chloroform or ethyl chloride is given to children or delirious patients. A daily cleansing bath and temperature baths are given, but the latter have no apparent effect on the temperature. Irrigations of warm boric acid solutions are given for the various conditions of the eyes, ears, nose, and throat. Hypnotics are also given.

"The diet consists of plenty of light nourishing food unless the fever is unusually high, when fluids are given. Convalescence may be rapid or slow. The patient should be watched closely for any untoward symptoms, as a relapse may occur.

"The patient should be strictly isolated, in a dark, well-ventilated room. Absolute quiet is imperative. All excreta and linen used about the patient should be disinfected and all utensils sterilized. All persons coming in contact with the patient should wear hoods and gowns to protect the hair and clothing. The nurse should spray her nose and throat about every four hours with an antiseptic solution, and use small gauze squares for handkerchiefs. These are to be burned or disinfected immediately and should not be used twice, as infection is chiefly through the mucous membrane of the nose and throat. After touching the patient the hands should be disinfected and a daily carbolic or bichloride bath taken. Sufficient rest and a daily walk in the fresh air are also necessary."

From more than one paper received, it would appear that district nurses are not always instructed how important it is to disinfect when attending a case of cerebro-spinal meningitis.

### QUESTION FOR NEXT WEEK.

What is Cataract? How would you prepare for an operation for its removal?

*previous page*

*next page*