

## OUR PRIZE COMPETITION.

WHAT ARE THE PREDISPOSING FACTORS IN TUBERCULOSIS? WHAT ARE THE MAIN PRINCIPLES OF TREATMENT IN NURSING? HOW CAN ONE PREVENT THE SPREAD OF INFECTION FROM AN INFECTIOUS CONSUMPTIVE?

We have pleasure in awarding the prize this month to Miss Florence Ibbetson, Essex County Hospital, Colchester.

### PRIZE PAPER.

The predisposing factors in tuberculosis are:—

1. First of all, *bad social conditions*, squalor, overcrowding, poor ventilation and insufficient food. People living under such conditions have a lowered vitality and therefore a poor resistance to infection. Also in overcrowded dwellings, if one person is infected, the other members of the household are constantly in contact with infection. It is well known that there is a high incidence of tuberculosis in the Navy, despite the healthy life, and this is said to be due to the crowded sleeping places.

2. *Children born of tuberculous parents* have a low natural resistance and tend to contract the disease, also, even where conditions are good, the disease may be spread to other members of the family and household by constant contact.

3. *If the general tone of the body is lowered* by illness, worry, dieting, etc., tuberculosis may supervene. It is also a dreaded complication after diseases of the lungs, as weakened lungs are prone to this particular infection.

4. *People who inhale dust* during the course of their employment are liable to contract tuberculosis, e.g., miners and quarrymen.

5. *It is a well-known fact* that people coming from countries or districts where tuberculosis is unknown are much more liable to contract the disease than people who live in districts where the disease exists. These latter absorb small doses of the disease from time to time and acquire an immunity. For example, during the War, the Anzacs easily succumbed to tuberculosis on reaching our shores, and to go further back in history, when America was first colonised by white races the Indians were readily infected and died in great numbers from tuberculosis.

6. *A large percentage of cow's milk* is infected by bovine tuberculosis, and, naturally, children fed with infected milk will be more liable to suffer from various forms of tuberculosis.

### THE MAIN PRINCIPLES IN THE TREATMENT OF TUBERCULOSIS.

1. *Active cases are isolated* in sanatoria for periods varying from six months to a year or even more. These special hospitals are situated in the country in pleasant surroundings and conditions there are ideal. The wards are light and well ventilated. Mild and serious cases are not nursed together. Open-air treatment is used for some forms of tuberculosis (not pulmonary). Visitors are restricted.

2. *Rest* is of greatest importance in the treatment of tuberculosis, general rest and absolute rest of the diseased part where possible. Where the lungs are affected the patient is nursed in the recumbent position and must do nothing whatever for himself until the

temperature becomes normal. This partly rests the lungs by lowering metabolism and lessens the toxæmia. If only one lung is affected it can be put at rest more completely by such special treatments as artificial pneumothorax, evulsion of the phrenic nerve, or thorocoplasty, all of which cause collapse of the diseased lung.

3. Rest is followed by *graduated exercise* in the convalescent stages. This induces gradual liberation of toxins in small doses, with which the body can cope, and antibodies and antitoxins are formed to combat the infection. The great guide is the temperature. If the temperature rises after exercise, the patient must go back to bed again. The temperature is taken four times daily. As the patient progresses, light interesting duties are provided for him, but he must rest for certain periods of the day.

4. Another important point is *to increase the weight*. The patient is given a highly nourishing diet. This must be appetising and in small bulk at first, as the appetite is poor. Gastric and general tonics may be ordered and cod liver oil as a rule. The patient is weighed weekly where possible.

5. *Perfect hygiene* is most essential. This must be practised in the sanatorium, and the patient must be taught how important it is to carry out these rules after he leaves hospital. The great danger lies in droplet infection and dried sputum that can be blown about. Sputum mugs are provided in the case of bed patients, and pocket flasks for the convalescent patients. The sputum is kept moist by the addition of a little water in the mug. Disinfectants are not advisable, as a patient might drink them. The sputum is disinfected before being disposed of, and the receptacle is boiled twice daily. Papier maché receptacles are sometimes used, and these can be burned. Paper or old linen handkerchiefs are best, as these can be burned also. If the patient uses his own handkerchiefs, they are received into a pail of disinfectant when soiled and a linen washable bag is given to contain the handkerchief when in use. The patient should cover his nose and mouth when coughing or sneezing, and should not spit about. He must always sleep alone and is advised not to kiss his relatives.

6. While the patient is confined to bed *general nursing* should be excellent. The skin must be kept in good condition and night sweats may be controlled by tepid sponging. Damp linen should be changed at once and chill prevented. The mouth and pressure points need careful attention. Keep the bowels open. Pain may be relieved by light poulticing, and the cough is best relieved by demulcents. Endeavour to maintain a cheerful frame of mind in the patient.

7. *The lungs* will be X-rayed from time to time: specimens of sputum will be required. Various preparations of tuberculin may be used, but are not very successful in pulmonary tuberculosis. Gold salts are of use in some cases, but toxic symptoms must be watched for.

8. *After discharge* the patient is expected to attend a clinic, where he can be overlooked until cure is complete.

### PRECAUTIONS TAKEN TO PREVENT SPREAD OF INFECTION FROM AN INFECTIOUS CONSUMPTIVE.

1. All cases of tuberculosis have to be notified, and

[previous page](#)

[next page](#)