

THE PRIZE COMPETITION FOR NOVEMBER.

Describe the nursing of a case of Diphtheria and its Possible Complications until Convalescence is established.

BY MANORAMABAI BHATDEKAR.

DIPHtheria is an acute disease of the throat, and larynx, sometimes also of the trachea and bronchi.

CAUSES.—Diphtheria is caused by a germ, a bacillus. This bacillus produces a poison which causes the general symptoms of the disease. The disease is an infectious one, as it occurs in epidemics; one cannot always say how the infection spreads. The bacillus is found in the membranes which are formed in the throat and larynx; thus it is easy to see how one coming in direct communication with another is liable to infection, such as in kissing, or coming in contact with the material brought up in a fit of coughing; some outbreaks have been traced to milk and bad sanitary arrangements. Diphtheria generally attacks children between the ages of three and twelve.

INCUBATION PERIOD.—The incubation period is not easy to ascertain, as the symptoms of invasion come on very quickly. It may be said to vary from a few hours of direct infection to a week or more. The patient feels chilly and disinclined for any work, suffers from loss of appetite, and he may feel sick; in this stage the temperature is not raised; the throat symptoms now appear, the fever becomes more marked, pulse quickened; in looking inside the throat it appears red, affecting the tonsils, soft palate and the pharynx behind the uvula; a sticky secretion is poured out and greyish membrane appears; if a piece of this membrane is detached for examination a raw surface would be left in addition to the membrane; there is a swelling under the jaw on each side due to enlarged glands.

The general symptoms vary considerably. We will briefly refer to a few types of the disease. (1) The mild case which requires little attention. (2) The case complicated by involvement of the larynx, the voice becomes husky, the breathing embarrassed, and the patient may die from suffocation. (3) The case which is characterized by great exhaustion, weak pulse and heart failure. (4) The case which is followed by various forms of paralysis (a) of the soft palate, unable to swallow fluids which return through the nose; (b) of the eye, causing squint; (c) of the limbs, which is seldom complete and rarely lasts two or three months.

In an ordinary case the temperature seldom rises higher than 103°. The urine contains albumin, the termination occurs by lysis, the average duration of an attack lasts a fortnight.

Death may occur from great exhaustion, heart failure or suffocation.

MANAGEMENT OF THE DISEASE. The management of Diphtheria (1) Prevention (2) Local symptoms (3) General symptoms (4) Diet (5) What is known as Anti-Toxin Treatment.

(1) *Prevention.* The patient must be isolated, and those who come in contact with him must constantly gargle with Condy's fluid; all discharges should be put into boiling water, the patient must expectorate into carbolic 1:20, or perchloride 1:1000, he must be kept away a week after all the symptoms have disappeared.

(2) *Local symptoms.* It is in the management of these symptoms that so much care is called for on the part of the nurse; without any warning the patient may develop most alarming symptoms in an apparently mild case. Various remedies may be applied to the throat in the form of powder, gargle or spray. Some of these remedies are boro glycerine, perchloride of iron, and glycerine carbolic and chloride of potash and Condy's fluid. The room must be kept warm and ventilated; hot fomentations may be given, and where there is difficulty in breathing, a bronchitis kettle and tent may be used. As soon as the nurses suspicions are aroused, preparations will be made for tracheotomy.

(3) *General symptoms.* The most important point is the depressing action on the heart. In all severe cases, alcohol will be necessary; drugs such as digitalis, perchloride of iron, and strychnine are given to strengthen the heart; in cases of paralysis a most valuable remedy is the battery and massage.

(4) *Diet.* If there is inclination to vomit, nourishment must be given little and often. Milk mixed with soda water, lime water, or iced in hot weather, beef tea, chicken-broth and Lemco may be given. In the case of children where food is refused, rectal nourishment by nutrient enemata or suppositories must be resorted to. Nasal feeding is troublesome and is never resorted to. Port Wine and Burgundy according to the age of the patient are allowed.

(5) Anti-Toxin treatment lastly given in injections.

NOTES ON THE PRIZE PAPER.

BY MISS THACKER.

There are a few very important points in the nursing of a case of Diphtheria, which are not quite sufficiently emphasized by Nurse Manorama-bai in her paper.

The most important complication is paralysis of the heart, which is one of the organs most frequently affected by the diphtheria toxins. In what seems like a mild case, the patient may suddenly drop dead, after some slight exertion, such as sitting up in bed. At other times there may be symptoms, such as persistent vomiting and a sudden increase in the pulse rate, to give warning that the heart is seriously affected. On no account should a case of diphtheria, however mild, be allowed to exert himself in the smallest degree. He should not raise his head, or turn himself in bed without assistance, and must never be allowed to sit up until the physician in charge of the case has given permission. Plenty of very nourishing diet and stimulants are important features of the treatment.