

### TUTORIAL GROUP.

The following paper on "Laryngeal Diphtheria" was presented for discussion on Tuesday, November 18th, at 39, Portland Place, W., at the meeting of the Tutorial Group of the British College of Nurses, by Sister Jessie Stewart, South-Western Hospital, Stockwell.

Laryngeal diphtheria may be primary or secondary. The disease may originate in the larynx, or spread from the fauces downwards.

The symptoms which follow are not only due to the membrane, but also to a great extent to the swollen mucous membrane and spasm of the upper respiratory tract.

The onset is sudden, and in the first twelve hours of the disease the only symptoms may be:—

- (a) Croupy cough.
- (b) Hoarseness or aphonia.
- (c) Moderate pyrexia.
- (d) Flushed face.
- (e) Urine may contain a trace of albumin, and acetone is nearly always present.
- (f) Dyspnoea is not marked.
- (g) Pulse rate and respiration are slightly increased.

As the disease progresses there will be frequent attacks of paroxysmal coughing, accompanied by cyanosis-stridor, dyspnoea, restlessness and sucking in of the soft parts of the chest-wall, especially the intercostal spaces and diaphragm. The extraordinary muscles of respiration will be brought into action: it is during this stage that the operation of intubation or tracheotomy will be performed.

If nothing has been done to relieve the patient he will now enter the stage of exhaustion, when the following symptoms will be present:—

Marked pallor of face, with cyanotic tinge around the mouth. Dyspnoea will be constant.

Pulse will be weak, rapid and irregular, or unduly slow; prostration will be extreme. Recession will still be present, but not so well marked. If the patient is operated on in this condition, death often occurs on the operating table.

The operation of intubation consists of a metal or vulcanite tube introduced through the mouth into the trachea. It has the advantage over tracheotomy in so far that it is a bloodless operation and leaves no scar. The disadvantage is that a doctor must always be within call, as the tube may be coughed up, and a nurse is not expected to replace it.

When this operation is performed, everything must be prepared for tracheotomy. The introduction of the tube may force membrane down the trachea and cause an obstruction, in which case the prognosis is a grave one. The intubation tube is kept in position by its own weight and shape.

The operation of tracheotomy consists of an incision made through the second and third rings of tracheal cartilages, and an outer and inner tube inserted. This operation may be performed with or without a general anaesthetic.

#### NURSING AND TREATMENT OF LARYNGEAL DIPHTHERIA.

Diphtheria antitoxin is injected intra-muscularly into the vastus externus muscle of the thigh, and if the symptoms are urgent the serum may be given intravenously. Antitoxin may have to be repeated twelve to twenty-four hours later. The amount given will depend on the severity of the attack.

The doctor usually orders the child to be put in a half-steam tent. Hot sponges or medical fomentations may be placed over the front of the neck. Glycerine may be ordered in doses of one dram. Everything should be done by the nurse to allay the patient's anxiety, and get him to sleep. Antitoxin also assists in inducing drowsiness.

Bromide gr. v may be ordered to be given to allay restlessness, and atropine gr.  $\frac{1}{100}$  to  $\frac{1}{50}$  to relieve spasm.

If tracheotomy is performed the nurse should see that the patient's bed is under a good light and a portable lamp within reach. Cardboard splints should be placed on the child's forearms to prevent any interference with the tube. The outer tube should be kept secure, and the inner tube clean. Square swabs of gauze should be wrung out of boiling water and applied over the tube, so that the patient may inhale warm, moist and filtered air.

The nurse should always be present when the child coughs, in order that she may wipe away any mucous or membrane which may be coughed up, and so prevent it being drawn back into the trachea. The dressing on the wound, which consists of a shaped disc of lint soaked in glycerine, is changed when necessary. The outer tube is changed usually every twenty-four hours, and in the majority of cases it is omitted on the third day. The usual cause of retention after that date is due to nervousness or granulations in the trachea.

If sudden dyspnoea (accompanied by cyanosis and restlessness) occurs after the operation, it is usually due to the outer tube being out of the trachea, the inner tube blocked or a piece of loose membrane flapping up against the inner orifice of the tube. This condition is alarming, and the nurse should notify the doctor. Meanwhile, she should remove the inner tube, and if there is no relief the patient's head should be placed over the edge of the bed and the outer tube removed, tracheal dilators introduced into the opening of the trachea, and kept in until the arrival of the doctor.

Progressive dyspnoea is nearly always due to the membrane invading the bronchial tubes.

The complications of tracheotomy are:—

- (a) Broncho-pneumonia.
- (b) Septic-pneumonia.
- (c) Surgical emphysema, which may be so severe as to prevent the introduction of the tube.
- (d) Hemorrhage from the wound into the lungs.

If the membrane is confined to the larynx or trachea there are rarely complications in connection with absorption of diphtheria toxin. Some authorities believe it to be due to the mucous secretion which neutralises the toxin, or to the weak absorptive powers of the mucous membrane

#### FEEDING.

In intubation the patient will be nasal fed.

In tracheotomy the patient can be fed for the first twenty-four hours with a teaspoon, and after that period a feeding cup can be used. Some doctors order nasal feeds. The staple diet is milk.

#### COACHING CLASSES FOR THE STATE EXAMINATIONS.

Nurses who desire to join the Coaching Classes for the State Examinations, please apply at once to—

The Secretary, British College of Nurses, 39, Portland Place, London, W.1.

Former pupils taught by Miss D. K. Graham have passed the State Examinations and been placed on the State Register of Nurses, without which qualification nurses have no legal status at home or abroad.

#### FIXTURES FOR DECEMBER.

December 16th.—Meeting of Tutorial Group. Subject for Discussion: "Faucial Diphtheria." 5.30 p.m.

December 20th.—Monthly Meeting of the Council. 2.15 p.m. Presentation of the Silver Platter in memory of Sir Richard Barnett; Ceremony of Cutting the Registration Cake. 5 p.m.

December 24th to 29th.—Christmas Holiday. Office closed.

[previous page](#)

[next page](#)