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## A Short Series of Lectures to Ward Sisters.

## LECTURE 8.—DIPHTHERIA (3).

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Let us turn now to the treatment : antitoxin must of course be given because there is a certain amount of poison circulating in the system. But it is also essential to supply the patient with more air than he is able to obtain, and this can be done in two ways, either by opening the windpipe below the site of obstruction —tracheotomy as the operation is called—or by pushing a tube through the obstructed larynx —this is known as intubation.

I am not going into the questions which determine which operation should be performed, but it is important for you to know at what stage surgical relief must be given. That, again, depends very much on whether the surgeon is accessible or not: in hospital practice I usually prefer to operate at the stage when the cyanosis is just beginning, but in private practice, where the doctor is not on the spot, the operation must be performed at a much earlier stage, that is to say, in that of restlessness, or sometimes when there is extreme retraction only.

The reason in hospital practice for delaying until the later period is that under the influence of antitoxin patients sometimes recover at any stage previous to this without operation.

There are certain other conditions in which the operation is done, namely, in cases where there are repeated attacks of severe obstruction with quiet intervals—this usually means the presence of loose membrane in the trachea below the larynx—and also in very enfeebled children one usually operates as soon as it is certain that they are becoming worse, however slight the progress in that direction may be.

I do not wish to describe either operation in detail. There are, however, one or two points in each of them in which the nursing is of importance. Let us take tracheotomy first : as you know, at Monsall such operations are invariably performed without an anæsthetic, and it is as well that you should all show your probationers practically in the wards how to hold the patient—I need not dwell upon that now. It may fall to your own lot to hold the head —that also is better learnt by practice than by precept, but I must caution you against allowing it to roll from side to side. It is quite easy to hold the head still if it is done in a proper way.

Then, it is important to remember that the first essential for the operation is the presence of the patient. I have known a child brought into the ward suffering from a severe laryngeal obstruction, and for all the nurses present then to run in various directions away from him, generally all in search of the same thing, which, again, is something that is not wanted, such as the latest variety of antiseptic lotion.

One nurse should always stay by the patient. The two things that the surgeon requires next (I am speaking now of cases of emergency) are : firstly, something hard to be put under the patient's shoulders, a sandbag is the ideal thing, but anything hard will serve the purpose—I have myself, on one occasion, found a large lump of coal very handy. One thing that is absolutely useless is a rolled-up towel, which invariably collapses at the critical moment. The next essential is a knife, and then a pair of tracheal dilators. In the absence of these it is possible to operate with an ordinary hairpin the variety without a waist is the most useful.

In an operation of emergency there is no time for asepsis, and it is particularly essential that a 1 in 20 carbolic solution should be avoided, for the simple reason that this fluid will cause excortation of the windpipe wherever the instrument touches it.

If there is time, of course, the operation can be done without hurry and with all due aseptic precautions, but remember, again, boiling and no antiseptic lotions.

After the operation you must remember that the child requires sleep and nothing else: he has extensive arrears of rest to make up, and he is anxious to begin as soon as possible. There may be a little hæmorrhage, but provided that the tube is a fairly large one this need cause no alarm.

Another point to remember is that the inner tube should be changed as seldom as possible, provided that it does not stick: this again depends upon the character of the secretion : if this is sticky and scanty the inner-tube may require changing very frequently ; if it is thin and profuse it very often does not require changing for several hours: it should not be changed simply because the child has a violent cough.

Similarly, the less food a child gets after tracheotomy the better, for the first forty-eight hours at all events, and it may be necessary for this to be administered through the nasal tube.

I think it is important to impress upon your probationers that a child who has a fairly large tube in its trachea is in a condition of safety:



