

Injectations of anti-diphtheritic serum are always given now, at as early a stage as possible. Many a bad case has been cut short if taken in time. A rash and joint pains will follow the injections, but are unimportant and the latter can be relieved.

Tracheotomy is an emergency operation which may become necessary at any moment when nursing children, and the nurse must be prepared for it. She should have ready to hand:—Scalpel, forceps, director, scissors, blunt hooks, tracheal dilators and outer and inner tubes, feathers (which have been cleaned and *boiled*) tape, sponges and ligatures, a small sand bag for the neck, and a lint dressing, spread with a simple ointment to go round the tube, between it and the child's skin. Over the tube should be placed pieces of lint, wrung out of warm boracic. Some physicians order steam kettle and tent, but the former method is the more usual one.

Wrapped in a sterilized towel, beside the bed, should be kept ready tracheal dilators and scissors, spare tubes and tape. Feathers should be in a bowl of weak solution of bicarbonate of soda. All dressings, sponges and feathers must be burnt after use. Frequent cleansing with feathers is unnecessary and injurious, but the inner tube should be removed and cleaned as often as necessary. The operation must be performed quickly, or the outer tube may get blocked.

If both tubes come out (which sometimes happens, either by the child pulling them out, or by the tape being tied too loosely and their being coughed out). The nurse must remain calm! Send for the doctor. Wrap the child's arms to its sides with a sheet, and lay it across the bed, with its head held straight, over the edge, nothing can be done if the child can struggle. Sitting on the bed, facing the child, the nurse must cut the tape and remove the tube. Introduce the dilators into the wound, the curve downward, then open them slightly. If they are in the trachea the child will immediately begin to cough and be relieved. The dilators must be held in position until the physician comes to replace the tube.

The nurse must do all in her power to prevent the child fretting and crying and to gain its affection and confidence.

PRIZE PAPER FOR DECEMBER.

BY MISS EILEEN POWELL.

Describe the Nursing of a case of Appendicitis, before, during and after operation.

CAUSE: Appendicitis is inflammation of the vermiform appendix; which may be due to, 1, constipation, 2 tuberculosis, 3 catarrh or, 4 foreign body.

SYMPTOMS:—Pain and tenderness in the right iliac region. Constipation, and in some cases vomiting and rise of temperature. A dull pain is usually present continuously, which sometimes suddenly develops into acute pain. The patient lies on her back, with her knees drawn up, and hot or soothing applications afford but little relief. The sharp attack of pain gradually wears off and subsides into a dull pain once more. Repeated attacks of this nature usually call for an early operation.

These symptoms may yield to medical treatment or there may be an extension of inflammation, leading to the formation of an abscess, and the appendix may rupture, or may get gangrenous. If it should rupture, the contents escaping into the abdominal cavity, will set up acute peritonitis.

A nurse will need all her powers of observation, when it is doubtful whether an operation is needed or not. In such a case the nurse must watch for and report at once any of the following danger signals. (1) Rigor with marked rise of pulse rate and temperature. (2) General abdominal distension. (3) Sudden relief of pain with marked increase of pulse rate; usually the result of the appendix having become gangrenous. The above mentioned symptoms usually call for immediate operation.

MEDICAL TREATMENT.

The bowels to be kept free by the use of enemata or aperients ordered by the doctor, and a soothing mixture containing bicarb. of soda, bismuth, etc. is sometimes ordered.

Some doctors advocate 5 ii doses of pure olive oil T. D. S., rest in bed and a light diet—Liq. paraffin is much used by others, being credited with the virtue of being both antiseptic and purge. This is usually given in an 5 i. dose at bed time.

SURGICAL TREATMENT.

Radical cure by removal of the appendix.

Preparation for operation—An aperient as ordered by the doctor, should be administered the day before operation. An enema of warm water and soap on the morning of the operation. No food for at least 4 hours before operation. The patient should be kept at rest in bed, and accustomed to the use of the bed pan a few days before operation.

PREPARATION OF SKIN.

Shave the genitals and abdomen, wash well with warm water and soap. Avoid friction. Give a final rub over with rectified spirits, sponge with Hyd. Perch. or some antiseptic lotion. Apply a dry compress of sterilized lint, and binder. Immediately before operation the bladder must be emptied.

COMPLICATIONS AND TREATMENT AFTER OPERATION. The first few days after operation the patient must be carefully watched and the following complications looked for :—(1) Shock, (2) Internal hæmorrhage, (3) Giving way of sutures. (4) Peritonitis.

SYMPTOMS OF SHOCK AND INTERNAL HÆMORRHAGE.

1. Beads of perspiration on forehead, skin cold and clammy.
2. Pulse soft, rapid and irregular.
3. Pallor of skin and mucous membranes.
4. Respirations shallow and accompanied by sighing and yawning.
5. Restlessness and anxiety.
6. Exhaustion, and fainting.

Treatment.—Absolute rest. Raise foot of the bed higher than the shoulder level. Raise bed clothes off abdomen, by means of a cradle. No stimulants. If exhaustion is severe give injections of normal saline warm, per rectum. Inform doctor and prepare for operation if hæmorrhage is suspected.

If the sutures give way, the patient will complain of something having broken. The bandage will be found pushed up by a swelling; or the intestines will be seen escaping from the edges of the bandage. The surgeon should be sent for at once, and preparations made for operation. The patient should be kept at rest and the intestines covered with sterilized dressings.

PERITONITIS. Peritonitis does not usually show till the third day when it is marked by rise of temperature, (2.) increased pulse rate, (3.) abdominal pain, tenderness, and distension, (4.) respirations shallow; voice very weak and an anxious expression.

Flatulence if present may be relieved by passing the rectal tube.

Aperient. 2 or 3 days after operation if bowels do not act, as ordered by the doctor; quite often the aperient is a saline or *ol. ricini*.

Urine.—The patient is usually able to pass urine. The catheter should not be resorted to till 16 hours after operation. Often a hot fomentation, or bottle over the bladder causes the necessary action. The abdomen should be supported while the patient is vomiting.

DIET BEFORE OPERATION. To be light and nutritious. Fish, lightly boiled eggs, junket, jellies and puddings, soup, Plasmon, tea and coffee made in milk. The patient would probably appreciate drinks of lemonade, barley water or orangeade.

The night before operation the patient should have a light dinner, say of a plate of soup and a milk pudding. A cup of Plasmon or milk six or four hours before operation. If the patient is very weak, the doctor should be consulted about the nourishments.

DIET AFTER OPERATION. As a rule no food or drink is given for four hours after operation, or until the nausea due to the anæsthetic has passed off. If the patient complains of thirst a little crushed ice may be given, which is more beneficial swallowed whole. Sips of hot water are preferable as it eases both thirst and vomiting.

A drink of about $\frac{3}{4}$ vi of hot water is often useful for persistent vomiting, as it practically washes out the stomach when returned.

When vomiting ceases, or about 12 hours after operation a small cup of good coffee or tea or beef-tea would be appreciated. Milk is usually taken readily by most patients, and should be started by giving $\frac{3}{4}$ i of milk with $\frac{3}{4}$ i of barley water. This quantity to be repeated in an hour if there be no vomiting, and the quantity gradually increased, till the patient is taking $\frac{3}{4}$ v milk with $\frac{3}{4}$ ii of barley water every 2 or 3 hours; i. e. about two to three pints of milk in the 24 hours. This quantity should be reached about 36 hours after operation.

On the third or fourth day semi solids, such as custard, jelly, bread and milk, till on the fifth day the patient may take a little boiled fish. Food likely

to cause flatulence should be avoided. Meat is not required till the 10th day except in the form of soups and jellies.

In complicated cases, or where vomiting is profuse, nutrient enemata may be given 4 or 6 hourly, quantity not to exceed $\bar{3}$ iv. They may consist of Lemco $\bar{3}$ i, yolk of an egg, $\bar{5}$ i of salt brought up to $\bar{3}$ iv by the addition of hot water or peptonized milk.

Once in 24 hours a bowel wash of plain warm water or boric lotion should be given.

In cases where there is much flatulence, Plasmon, albumen water, Bovril, and Brand's meat jelly, are useful instead of milk; when milk is given it should be peptonized. Some surgeons prefer this to a plain milk diet.

BOOK REVIEW.

ELEMENTARY BACTERIOLOGY FOR NURSES.*

IT is good to know causes of things as they are, the causes of such and such conditions, the why and wherefore this and that is done to combat them, and the means to the end, such end being as in the present case,—cure. This little work, chiefly a reprint of papers already published in the Nursing Mirror is full of instruction in plain language yet attractive, and only slightly too technical for the generality of lay person and easily grasped by any intelligent nurse. Its substance would make excellent lectures for the non-medical world, to be used unsparingly with the language merely adopted to the audience, dealing as it does with so many problems of everyday life and their comparatively easy solution, ills and their prevention, diseases and their *detection* rather than their *cure*, as the subject is Bacteriology, not Therapeutics. But is not cure most often dependent upon diagnosis? given correct diagnosis, treatment is usually on straight lines of success;—when obscurity of cause exists, many treatments of symptoms may be tried and fail, hence the all-important dictum, “diagnose,” above all things diagnose correctly and use all the helps of latest scientific research to this end, and most of present-day diseases can be cured:—and by this means too, a few, just a few fell diseases that have so far resisted the whole medical world will surely eventually succumb. The nurse's duty in aiding both in diagnosis and subsequent treatment by anti-toxin injections lies largely, in making preparation for the physician to take specimens, make tests and give injections; but most responsibly in watching the symptoms of reaction, and rules for these are very carefully laid down by Dr. Meachen. One first rate piece of advice only too little known or recognized is regarding infectivity of handkerchiefs used by persons suffering from influenza and common colds, as well as the more serious complaints. They should invariably be disinfected or boiled before any irre-

* By G. Norman Meachen.

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